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GAF

GAF CORPORATION

ANNUAL REPORT 1981

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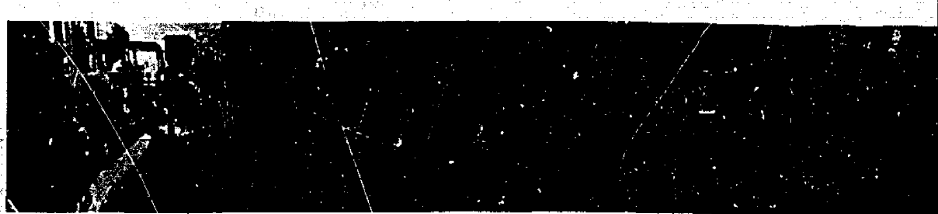

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Financial Highlights

Financial Highlights	1981	1980	1979
Net Sales	**$ 672,514,000**	$ 677,216,000	$683,749,000
Income (Loss) from Continuing Operations	**$ (28,236,000)**	$ 10,323,000	$ 25,828,000
Income (Loss) from Discontinued Segments	**54,296,000**	(243,799,000)	2,355,000
Net Income (Loss)	**$ 26,060,000**	$(233,476,000)	$ 28,183,000
Earnings per Common Share			
Primary			
Continuing	**$(2.24)**	$ .50	$ 1.66
Discontinued	**3.86**	(18.07)	.17
Net Income (Loss)	**$ 1.62**	$(17.57)	$ 1.83
Fully Diluted			
Continuing	**$(1.57)**	*	$ 1.49
Discontinued	**3.07**	*	.13
Net Income (Loss)	**$ 1.50**	*	$ 1.62
Cash Dividends per Share			
Preferred	**$ 1.20**	$ 1.20	$ 1.20
Common	**$ .80**	$ .77	$ .68

*Figure omitted—not dilutive.

Shareholders Information

The 1982 Annual Meeting of Shareholders will be held at 10:00 a.m., Tuesday, April 27, at the Marriott's Pavilion Hotel, One Broadway, St. Louis, Missouri.

Stock Transfer Agent & Registrar:

Citibank, N.A.
111 Wall Street
Sort 3195
New York, N.Y. 10043
(212) 558-7887

GAF offers holders of its common and preferred stock the opportunity to buy additional shares through an automatic dividend reinvestment service, administered by Citibank, N.A. For further details contact:

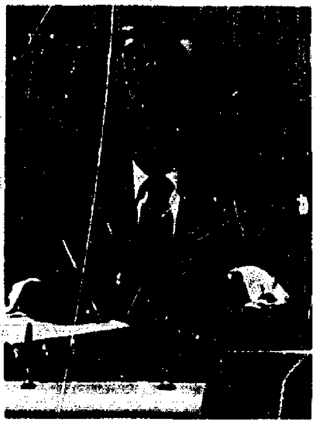
Citibank, N.A.
111 Wall Street
Sort 3197
New York, N.Y. 10043
(212) 558-5382

Form 10-K as filed with the Securities and Exchange Commission may be obtained, free of charge, by writing to:

GAF Corporation
140 West 51 Street
New York, N.Y. 10020

Investor Relations

Message to our Shareholders:



Dr. Jesse Werner

In 1981 GAF sales from our continuing chemical and building materials businesses were $672.5 million compared with sales of $677.2 million in 1980. Earnings from continuing and discontinued businesses were $26.1 million or $1.62 per share primary compared with a loss of $233.5 million or $17.57 per share primary in 1980. In each case the year's earnings figure is affected by provisions for discontinued businesses. In 1980 there was a provision of $244.2 million (after taxes) to cover the estimated loss from discontinuing several businesses. In 1981 $54.3 million (after taxes) of this reserve and of a smaller reserve related to 1977 discontinuances was reversed.

The depressed economic scenario of 1980 was intensified in 1981. The international recession seriously dampened the demand for chemicals, and the performance of GAF's specialty chemicals in achieving a 6 percent increase in sales and a 10 percent increase in earnings last year is therefore particularly noteworthy.

This increase comes in spite of a $3.4 million reduction in chemical export profits, due primarily to the strength of the U.S. dollar against foreign currencies and the generally depressed market for the roofing granules segment of the chemical business.

On the other hand, GAF's continuing building materials business suffered the full brunt of the year's economic climate and had its worst year in the post-war era.

New housing starts fell to 1,101,000 units (the lowest since 1946) against 1980's depressed level of 1,313,000 units. Moreover, extraordinarily high interest rates throughout the year had an even more negative effect on the reroofing market, normally the major part of GAF's business. As a result sales revenues were down almost 6 percent compared with 1980, and cost increases could not be passed along in price increases. Results went from a profit of $13.7 million to a loss of $38.6 million. This includes a $15.1 million provision for felt mill shutdowns and reflects lower unit sales, cost increases and additional expenses relating to commercial roofing.

GAF's continuing operations showed a loss for the year of $28.2 million (after taxes) as a result of the above. However, this loss was offset by the restoration to income of $43.6 million (after taxes) as a result of the successful completion of the divestiture program begun at the end of 1980. At that time the company stated that it was undertaking a major restructuring which would include offering for sale a number of operating businesses and establishing a reserve and liability for the program on what was believed to be a conservative basis. By January 1982 the program was essentially completed.

Six businesses were sold, starting with pictorial prod-

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ucts in July, graphic arts and vinyl siding in August, flooring in September, paper and millboard in November and ending with reprographics in January 1982. There remains some real estate to be sold and some receivables to be collected. One business, radio station WNCN-FM in New York, is being withdrawn from the program.

Including the reprographic sale, $171 million in cash and almost $15 million in long-term notes have been generated to date. Another $23 million in cash is expected to be received in 1982 from the continuing liquidation of inventory and the closing of several real estate transactions. In addition, an estimated tax benefit of $57 million will be available to offset taxes on income in future years.

The divestiture project required the utmost effort from a great many GAF employees. The program was centered in the company's commercial development department, and these people in that department, as well as those in the accounting, legal, tax and other departments responsible for the many facets of these simultaneously ongoing negotiations, worked unremittingly to bring the program to an equitable and rapid conclusion. They did a remarkable job and were responsible for the success of the program. Those management people who were going with the businesses being sold also had the difficult job of trying to maintain loyalty and operating efficiency in the uncertain climate existing between the announcement of sale and the consummation.

One other financial improvement which helped achieve the previously mentioned reversal of the liability reserve was a major change in the corporation's employee pension fund asset mix. A dedicated bond portfolio was established which is providing an income stream sufficient to cover the actuarially calculated payments to all retired and vested former employees, including those of the discontinued businesses. This portfolio, plus a change in interest assumptions and a concomitant increase in the salary assumption, has made the pension fund fully funded for all existing prior service obligations. As a result, pension contributions for 1981 and future years are substantially reduced.

Now that the redeployment program is essentially completed, GAF is able to turn its full attention to improving and expanding the operations of the two continuing businesses.

Summarized in the chemical and corporate sections of this report are some of the many activities under way in 1981 aimed at increasing sales and profitability of our specialty chemical business. New products have been added to the line and new uses have been developed for existing products. The customer base has also been broadened considerably. This broad customer base and the wide spectrum of uses constitute the strength of our specialty chemical business. While it is very difficult to outperform the economy steadily, we have managed to show growth in this field year after year, and will make every effort to continue to do so.

The building materials segment of GAF's business, on the other hand, is in a different posture. The company continues to believe that it is the leading supplier of residential roofing products in the United States. However, a return to former rates of profitability is predicated upon lower interest rates, increased housing starts to normal levels, and recovery of the reroofing market. In the meantime, every effort is being made to ensure that when demand revives, GAF will be in the best possible posture to recover earnings promptly.

The conclusion of the redeployment program has also made it possible to streamline and strengthen the organization and reduce costs considerably. All of our managers continue to review their operations toward this end.

In spite of the extraordinary difficulties of 1981 the continued strength of the chemical operations, joined with the cash inflow of the divestiture program, have strengthened the company's balance sheet. With the January 1982 sale of the reprographic business, $64 million has been applied toward debt reduction. Unfunded pension liabilities have also been eliminated. Discussions are therefore under way to replace the worldwide, three-year $225 million credit agreement negotiated with a consortium of banks at the beginning of 1981 with a new long-term revolving credit agreement for $75 million.

The pretrial motions in GAF's antitrust case against Eastman Kodak in the U.S. District Court for the Southern District of New York have been resolved favorably to GAF and a trial date of May 3 has been scheduled. The company continues to be confident of the successful outcome of its case.

The current economic situation in the United States and abroad makes it difficult to speak optimistically about the immediate future. However, the steps taken in 1981 to streamline and strengthen GAF give every assurance that our prospects for growth in the decade ahead continue to be strong. We know that the team of GAF people now in place has the skills, the tools and the determination to achieve greater growth and profitability as the economy improves.

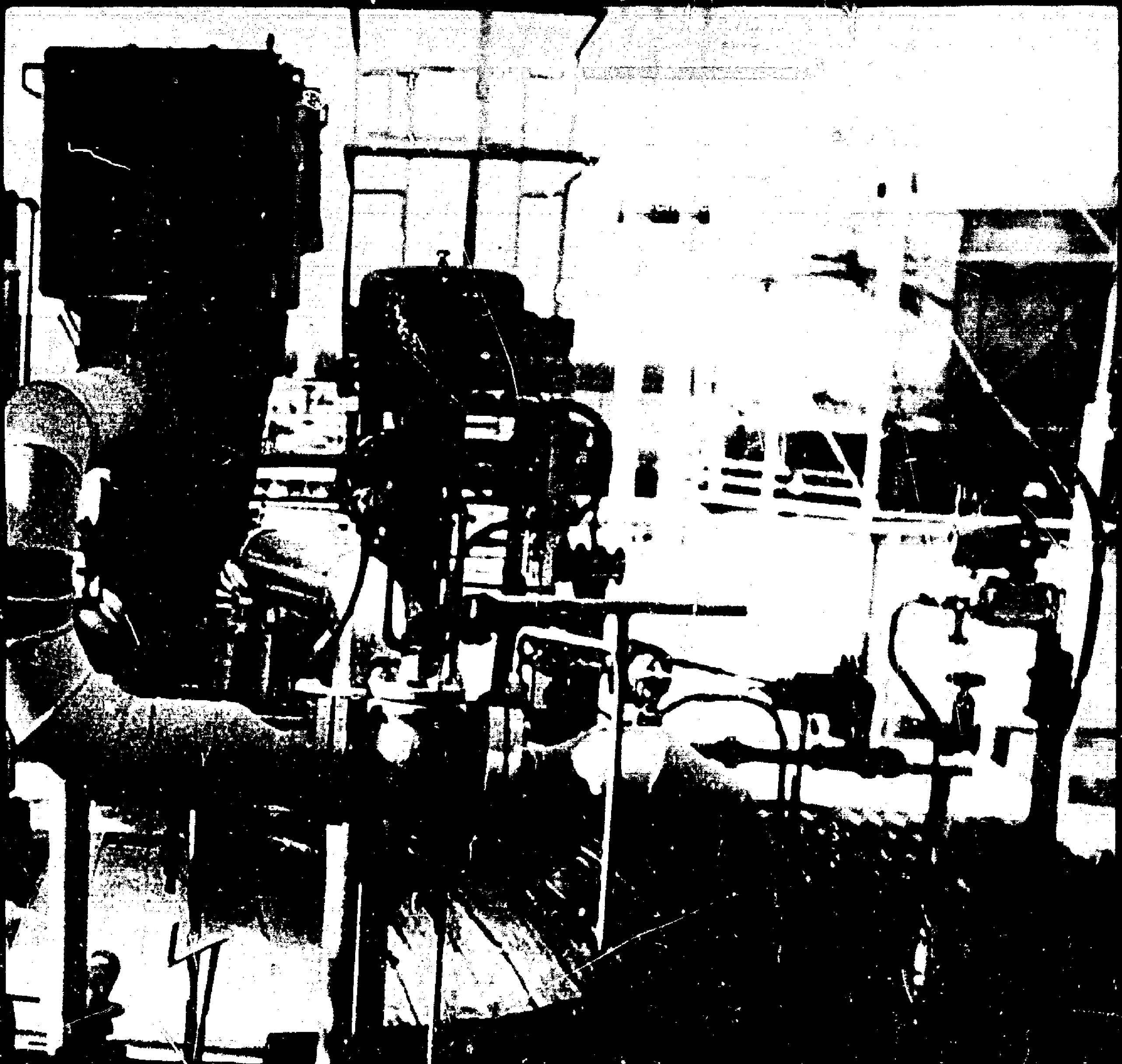
By Order of the Board of Directors

Jesse Werner

Jesse Werner
Chairman of the Board

March 3, 1982


Chemical



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Chemical

Results

(Dollars in Millions)	1981	1980
Net Sales	$300.8	$284.4
Direct Operating Profit*	$ 56.6	$ 52.0

*Excludes Corporate and Interest Expenses

Sales and profits

Worldwide sales for GAF's continuing chemical business were $300.8 million, an increase of 5.8 percent over 1980.

Direct operating profits in 1981 were $56.6 million, an increase of 8.8 percent over 1980.

These results are due to overall strong demand for GAF's specialty chemical products and relative price firmness. This is particularly noteworthy in the face of the problems in certain market segments, notably continued low demand for roofing granules, and a $3.4 million reduction in export profits due mainly to foreign exchange rates on chemical products sold abroad.

This strong performance in 1981 arises from the mixture of factors that have given GAF's chemical business its long record of outstanding growth and profitability.

First of all, the GAF product lines fit the classic definition of chemical specialties. This means that they tend to be products of above average price sold in relatively small quantities to a wide variety of users for a wide variety of unique applications.

In 1981 the company continued its steady progress in finding new uses and new customers here and abroad for existing products, as well as in introducing new products for customer evaluation through its market development activities.

All of these GAF product lines can be expanded only if there are effective marketing and technical services as well as continuous research and development efforts in both product and process improvements. These we are committed to do, and there are positive results to report in all these areas for 1981.

Acetylene derivatives
Use of GAF's acetylene-based polymers grew in both cosmetic and pharmaceutical applications. Polyplasdone XL® cross-linked polymer (crospovidone NF) has been accepted by major pharmaceutical manufacturers

Product List

Chemicals
Acetylene Derivatives
Agricultural Specialties
Intermediates
Iron Powders
Monomers
Polymers
Solvents
Specialty Chemicals
Surfactants
Textile Chemicals

Engineering Plastics
PBT Thermoplastic Molding Compounds

Mineral Products
Mineral Granules

as a leading disintegrant for use in tablet formulation. This adds another specialty item to the list of GAF products such as Plasdone* polymer (povidone USP), already accepted in such pharmaceutical applications as tablet binders, granulating agents and coating agents.

In the cosmetics field, GAF's customers for Gantrez* hairspray polymers introduced new consumer products and used increased volumes of our products. The company continued to offer an ever widening choice of film formers for use in both pump and aerosol applications. GAF is recognized as the leading supplier to this market.

In the conditioning shampoo market, Gafquat* polymer sales increased sharply with the introduction of several new consumer products.

The demand for GAF solvents and intermediates grew with special emphasis on nontoxic solvents for industrial cleaning and coating applications, intermediates for plastic and polymer syntheses, and corrosion inhibitors for oil well additives. Even in the depressed automotive market, growth was experienced in the use of butanediol for polyurethane production.

Gaftex* PT cross-linked methyl vinyl ether polymer is a new thickener for textile print pastes. It reached commercial sales volume as compounders recognized its superior viscosity and its ability to give sharp prints on resin-treated goods.

Butanediol sales to the manufacturers of PBT engineering plastic increased. GAF's own line of Gafite* PBT resins expanded appreciably as new products were introduced and customer demand grew. Some of the new Gafite brand products introduced in 1981 include a foamable PBT and a new resin for films. The foamable product has extra lightness and better surface characteristics. PBT films are being evaluated for packaging applications where intense heat is encountered, such as in "hot fill" food packages.

Specialty surfactants

The domestic surfactant line was pruned of a number of small-volume, low-profit items in 1981. Special emphasis continued in the cosmetic, paper, and emulsion polymerization areas. Sales and profit results both showed improvement from existing products and from new product introductions.

Among the new products introduced were two new Alipal* sulfates for adhesive production and a new Igepon* TC surfactant, a foaming aid for toothpaste.

Other specialty chemicals

Market development continued encouragingly on GAF's new family of Gafgard™ polymeric coatings for use in UV or electron beam curing. Three Gafgard products are now available to resilient flooring producers who need impact-resistant coatings. A new patented product, Gafgard 233 coating, was introduced in 1981. It offers super abrasion resistance for flexible film substrates of all types and is being evaluated by a variety of film manufacturers.

As a result of strong growth opportunities in acetylene chemicals and a premier position in both the acetylene and specific surfactant markets, GAF early in 1982 launched a program to expand its sales efforts by opening three new sales districts and increasing the size of its specialty chemical sales force by 35 percent.

Roofing granules

GAF's roofing granules are sold to manufacturers of roofing shingles and roll roofing. The volumes used are therefore directly related to the levels of production of roofing materials. In spite of the decline in roofing volumes, sales and profits of GAF's granules in 1981 were close to 1980 results. This was due to several factors including some volume increases from changes in customer mix and improved plant efficiencies. The capital expenditure program begun in 1979 for the granules plants was continued. It resulted in additional capacity coming on stream as well as the completion of several major pollution control projects.

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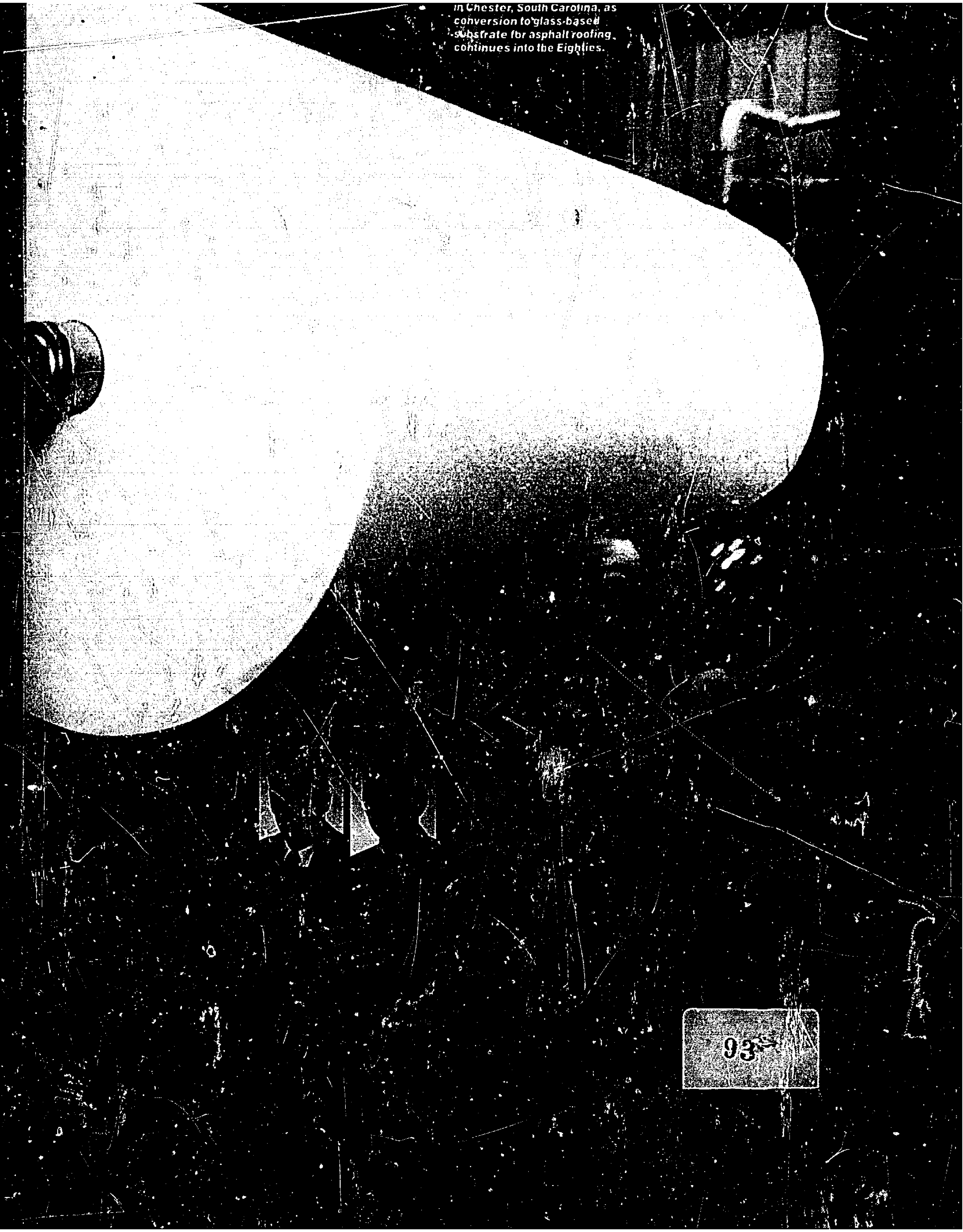

in Chester, South Carolina, as conversion to glass-based substrate for asphalt roofing continues into the Eighties.

Building Materials

Results

(Dollars in Millions)	**1981**	1980
Net Sales	**$371.7**	$392.8
Direct Operating Profit (Loss)*	**$ (38.6)**	$ 13.7

*Excludes Corporate and Interest Expenses

Sales and operating results

Sales of GAF's continuing building materials business in 1981 were $371.7 million, down $21.1 million from $392.8 million in 1980. The problems which affected sales in 1980 were all intensified in 1981. There was an absolute decline in physical volume of roofing materials shipped, while the cost of raw materials, led by asphalt, increased appreciably. Pricing levels during the year were almost flat.

Building materials had an operating loss of $23.5 million against a 1980 direct operating profit of $13.7 million. This followed in part from the problems which so severely affected sales. In addition, a write-off of $15.1 million was taken at year-end for the closing of three felt mills and accelerated depreciation on certain remaining felt lines.

Decreasing demand led in September 1981 to placing two of GAF's fourteen roofing plants, Denver, Colorado, and Kansas City, Missouri, on indefinite furlough. In December the Joliet, Illinois, plant began a several months shutdown. With the exception of the plants in Dallas, Texas, and Tampa, Florida, all the company's roofing plants have been operating at reduced levels throughout the second half of the year. It should be noted that the entire roofing industry is reporting similar conditions.

The same factors of economic uncertainty and high interest rates present in 1980 existed in 1981 at even more intense levels. Asphalt prices have nearly doubled in the last three years.

Product List

Roofing Products
- Accessories
- Asphalt Shingles
- Built-up Roofing Materials
- Coating & Plastic Cements
- Roll Roofing
- Vent Systems

Insulation Products
- Building Insulation
- Built-up Roofing Insulation
- Fastener System

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It is believed that GAF's share of market in the roofing business has been maintained during this period. When the demand revives in both the reroofing and new housing markets the company will be in an even better position to participate profitably in this basic American industry. Therefore, in spite of the wrenching economic circumstances of 1981 and the resulting stringent cost control programs in all areas, investments looking to future growth and improved efficiencies continue to be emphasized.

The new roofing line approved in 1980 for the Dallas plant was completed and began a successful start-up in December. A major program of technological upgrading of the roofing plants is under way. This several-year effort is expected to reduce manufacturing costs and improve quality, which in turn will increase sales volumes and profit margins and thus maintain GAF's leadership position in the roofing industry. This major effort aims at reduction in raw material and energy consumption, improved product yields and more efficient quality control procedures. Joint research, development and engineering efforts reached the first implementation stages by year-end 1981.

Roofing

The conversion to the use of glass mat as a roofing substrate in place of organic felt continued in 1981 for both roofing shingles and built-up roofing. Production at the new glass mat plant in Chester, South Carolina, was expanded and successfully met these increased requirements.

As a result of the accelerating change in technology and the generally lower volumes of roofing material manufactured during the year, production has been curtailed on the company's nine existing organic felt machines. Three felt machines at Dallas, Kansas City and Joliet have been shut down and written off. A program of accelerated depreciation has also been implemented for several additional machines.

Glass mat has some significant advantages, such as lower asphalt usage, which are expected to lead to its greater use in the future, but the good qualities of organic felt-based products indicate that felt machines will continue to be needed by GAF for many years to come.

The year brought the introduction of several accessory products to the built-up roofing line, including Gafglas® flashing and new expansion joint covers.

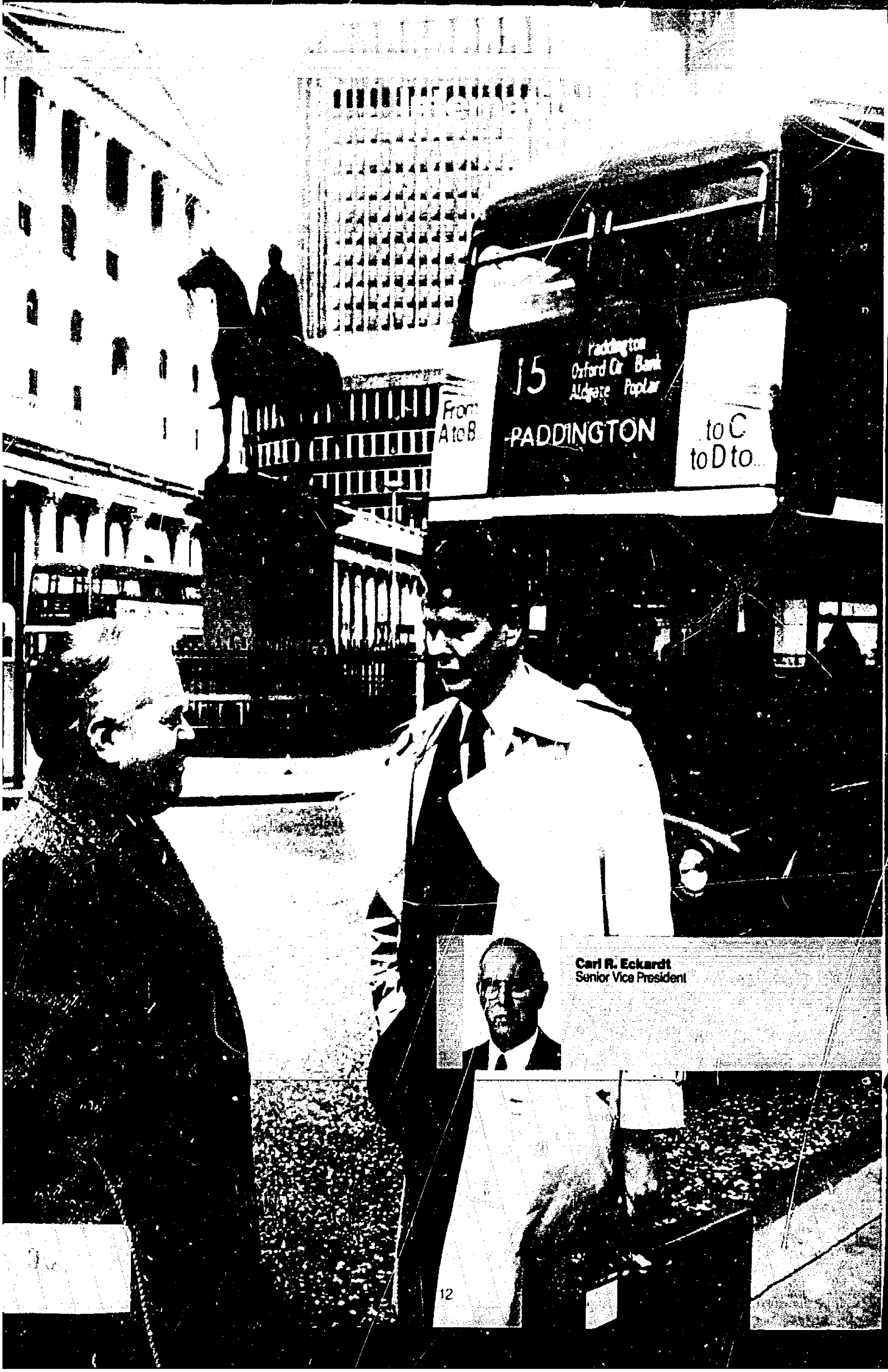
To generate sales in the reroofing market, a Roof Maintenance/Repair/Reroofing Program was introduced to the trade in the fall of 1981 and response has been gratifying.

Sales and profits of Gaftemp® polyurethane insulation used under built-up roofing and manufactured at GAF's plant in St. Louis, Missouri, increased as greater penetration of the market was achieved.

Building supply centers

GAF entered 1981 with five building materials supply centers in place. During the year four additional centers were opened in Wilmington, Delaware; Buffalo and Syracuse, New York, and Beltsville, Maryland.

The program is still in start-up, but it has already achieved substantial sales. Moreover, the sales of GAF roofing products made through these outlets are in markets where GAF is under represented and would therefore not otherwise have been achieved.



Carl R. Eckardt
Senior Vice President

Total international sales of GAF products from continuing businesses to customers around the world were $77 million in 1981 compared with $84 million in 1980. In local currencies sales of most of the chemical product lines showed increases, but foreign exchange translation variances had a strong negative impact. Similarly, operating profits had a decline of $3.4 million due primarily to the strength of the U.S. dollar against foreign currencies. These figures are included in the results of the chemical and building materials worldwide groups.

Most of the GAF sales outside the United States are chemicals. The company's specialty chemicals, manufactured in the United States, are exported throughout the world and sold directly by GAF subsidiaries or through distributors. In addition, butanediol and tetrahydrofuran are manufactured and sold in Europe by GAF-Hüls Chemie, a joint venture between GAF Corporation and Chemische Werke Hüls, which operates a plant in Marl, West Germany.

The company also manufactures a line of filter products in Sint-Niklaas, Belgium. These are sold throughout the world outside the United States.

The redeployment program created special difficulties for the continuing GAF international operations due to the sale of the major GAF infrastructures in Europe, Australia and Canada. A new organizational structure had to be established and some new physical locations have had to be found for the chemical marketing departments in these countries. The new streamlined organization is essentially in place and GAF marketing offices, technical service centers and warehouses are operating in 17 locations in Europe and the Near East as well as Canada, Mexico, Brazil, Australia, Singapore and Japan.

The international group's plan for 1982 and beyond is to continue to grow both through exporting specialty chemicals and developing manufacturing operations in appropriate locations.

Another important mission is to develop export markets for GAF's line of building materials. GAF's roofing products are becoming more economically and esthetically competitive with existing roofing systems used abroad. This creates new marketing opportunities which are being explored and which will be implemented as appropriate.

A new and streamlined international operation is in place with GAF marketing offices, technical service centers and warehouses operating throughout Europe, the Near East, Canada, Mexico, Brazil, Australia, Singapore and Japan.

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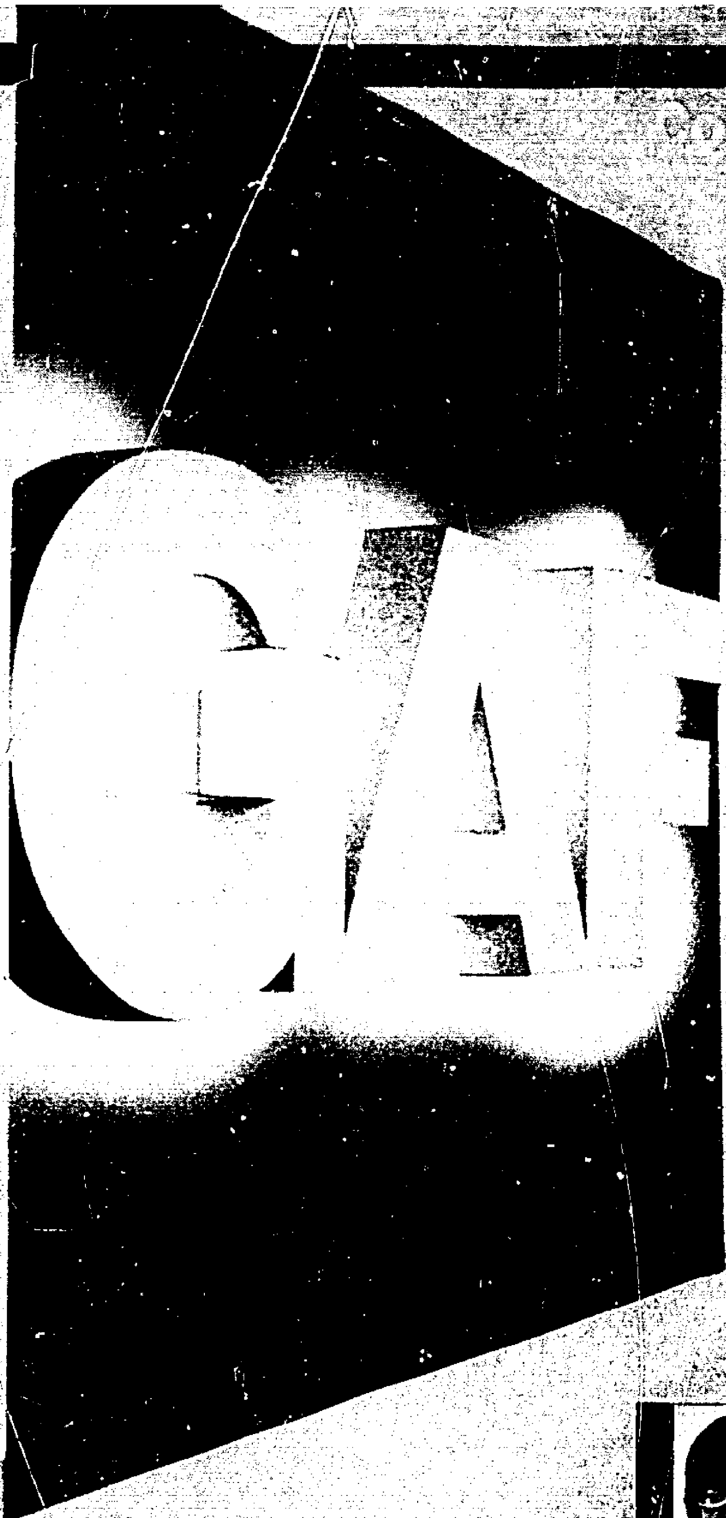
Corporate



Juliette M. Moran
Vice Chairman

James T. Sherwin
Executive Vice President

Richard F. Smith
Executive Vice President

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Corporate & Other Businesses

Redeployment program

On December 30, 1980 the company announced that it was classifying as discontinued, for accounting purposes, several businesses and that these businesses would be offered for sale. A provision of $244.2 million (after taxes) was taken against 1980 to cover the estimated costs of these discontinuances.

The announcement brought in more than 400 inquiries in the first few months of 1981. By the end of March the first letter of intent looking to the sale of the first of these businesses had been signed. By January 8, 1982, the program was essentially completed with the sale of the last of the businesses offered. The chronology of the sales is as follows:

- July 2—sale of pictorial products business for approximately $25.9 million including notes of $2.5 million and accounts receivable retained by GAF.
- August 13—sale of graphic arts business for approximately $38.0 million including notes of $5.0 million and accounts receivable retained by GAF.
- August 19—sale of vinyl siding business for approximately $4.2 million including notes of $0.9 million and accounts receivable retained by GAF.
- September 29—sale of flooring business for about $51.0 million in cash.
- November 2—sale of paper and millboard business for $4.5 million in cash.
- January 8—sale of reprographic business for about $63.9 million in cash and $9.7 million in notes. GAF retained nearly $9 million in receivables and other assets, and the buyer assumed $21.2 million in liabilities.

As of January 1982 there remained unsold only two units which had been offered in the original package. One is an idle plant in Joliet, Illinois, which had manufactured automotive mastic and which was permanently shut down in mid-1980. This well maintained and well located plant should prove attractive as a real estate investment when the economy in the Midwest is more favorable.

GAF Broadcasting Company, the subsidiary which includes WNCN-FM and its associated magazine Keynote, continued its steady growth in sales and profitability and achieved a profit before taxes. This result reflects increasing sales revenue, which in turn came from increasing recognition of the station's programming quality by listeners and sponsors. In 1981 this was recognized by the prestigious Peabody Award to WNCN for "overall excellence in classical music programming." In view of these circumstances and the successful completion of the overall redeployment program, WNCN is being withdrawn from the program.

In 1982 it is expected that most of the remaining wind-down of the already accomplished deployment can be completed. This includes collection of the remaining receivables and sale of miscellaneous assets, primarily real estate in Europe.

As a result of the sales under the divestiture program, the reserve and liability established at year-end 1980 for discontinued segments were reevaluated and determined to be more than needed to cover anticipated costs. The excess of $43.6 million after taxes of $6.5 million was restored to income from discontinued segments.

Research, Development and Engineering

The company's research and development activities in 1981 resulted in new and improved products and processes for both the chemical and building materials sales lines.

In addition to the individual items discussed in previous sections of this report, new products from research now under further market evaluation include:

- A new class of highly effective corrosion inhibitors for metal
- A new solvent for aromatics extraction in petroleum processing.
- Electron beam-sensitive materials for applications in microelectronics.
- Novel materials for roofing shingles. In this area work has also continued on the use of sulfur-asphalt emulsions as asphalt extenders in shingles. This research program has been supported in part by funds from the U.S. Government.

Process improvements in all of GAF's manufacturing operations continue. The high-pressure acetylene derivatives line has benefited in 1981 from new and improved catalysts and from debottlenecking which gave significant capacity increases in certain key processes.

The company also had encouraging results from its ongoing efforts to increase efficiency of energy usage.

A great deal of activity centered on meeting government standards of environmental control. Capital expenditures of more than $5,000,000 were devoted to this area in 1981.

Personnel

In 1981 there were 19 labor contracts negotiated for continuing businesses, all for multi-year terms. Contract terms compared favorably with those reported by the U.S. Department of Labor. Three strikes were experienced during the year at Denver, Colorado, for 31 days; Millis, Massachusetts, for 35 days, and Calvert City, Kentucky, for 24 days.

GAF's continuing businesses employ approximately 6,500 people. A similar number were employed in the discontinued businesses, and well over 90 percent of those who left GAF continued in their employment with the new owners of these businesses.

Management

In November a new seven-member Office of the Chairman was organized to provide overall direction to the corporation. Besides chairman Jesse Werner, the new group includes the vice chairman, the two executive vice presidents, and the three senior vice presidents in charge of GAF's operating groups.

In April Robert H. Beber was elected senior vice president, general counsel and secretary. Mr. Beber had been staff vice president for RCA Corporation.

In October Carl R. Eckardt was elected senior vice president responsible for international operations. Mr. Eckardt joined GAF in 1974 and was most recently vice president and head of the commercial development department.

In November Raymond J. Lacroix, controller, was also elected vice president. Mr. Lacroix joined GAF in 1971 as a division controller.

In March 1982 Bernard L. Kapell, vice president, was also elected treasurer. He joined GAF in 1974 as director of corporate taxation.

Board of Directors

In November Dr. Richard F. Smith, executive vice president of the corporation, joined the board, succeeding Jay R. Olson, former president, chief operating officer and board member who resigned in that month.

Board of Directors

Jesse Werner
Chairman

Juliette M. Moran
Vice Chairman

T. Roland Berner
Chairman of the Board
Curtiss-Wright Corporation

Peter Bosshard
Executive Vice President
Credit Suisse

Augustine R. Marusi
Formerly Chairman of
the Board
Borden, Inc.

James T. Sherwin
Executive Vice President
GAF Corporation

Richard F. Smith
Executive Vice President
GAF Corporation

Herman Sokol
Formerly President
Bristol-Myers Company

Nolan B. Sommer
Formerly Senior Vice President
American Cyanamid
Company

Robert Spitzer
Chairman of the Board
Treadwell Corporation

The Board of Directors Audit Committee, consisting of outside directors, meets separately with the independent certified public accountants and company management at least twice a year to discuss the scope and results of the annual examination, internal accounting controls and significant accounting matters.

Officers

Jesse Werner
Chairman of the Board

Juliette M. Moran
Vice Chairman

James T. Sherwin
Executive Vice President

Richard F. Smith
Executive Vice President

Robert H. Beber
Senior Vice President
General Counsel and
Secretary

John A. Brennan
Senior Vice President

Carl R. Eckardt
Senior Vice President

Louis G. Zachary
Senior Vice President

Jonathan Berger
Vice President

John J. Butler
Vice President

Bernard L. Kapell
Vice President and
Treasurer

Raymond J. Lacroix
Vice President and
Controller

Donald W. LaPalme
Vice President

Abraham Lindenauer
Vice President

Robert F. McCarthy
Vice President

Raymond W. Smith
Vice President

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Management's Discussion and Analysis of Financial Condition and Results of Operations

Financial Condition

On December 30, 1980, the company announced it was undertaking a major restructuring which would include offering for sale a number of operating businesses. By January of 1982 the program was essentially completed. In summary, a total of six businesses were sold starting with pictorial products in July, graphic arts and vinyl siding in August, flooring in September, paper and millboard in November and reprographics in January 1982. In addition, the latex operation in Chattanooga, Tennessee, was sold during the latter part of 1980. Total proceeds from these sales in 1981 amounted to $107 million in cash. Initial proceeds of $63.9 million from the sale of the reprographics business were received by the company in January 1982. In addition, the company projects $23 million in cash from the sale of residual assets during the first half of 1982 that will complete this program. Additional cash inflows will accrue to the company in future years as approximately $15 million in interest-bearing notes received from certain buyers are retired. Finally, the company's financial condition was further strengthened by assumption of $21.2 million in liabilities by the buyer of the reprographics business.

The relative impact of this program on the financial condition of the company is reflected in the chart below.

	Dollars in Millions		
	December 31, 1980	July 1, 1981	December 31, 1981
Total Long-Term Debt	$193.539	$327.521	$315.571
Notes Payable	57.989	36.456	17.448
Cash/Short-Term Investments	(21.935)	(26.434)	(13.348)
Net Debt	$229.593	$337.543	$319.671

During the last six months of the year the company's net debt was reduced by approximately $118 million from the cash proceeds of the businesses that were sold starting with the sale of pictorial products in July 1981.

The overall importance of this program, which was successfully completed in one year, cannot be overstated. Although the year-end balance sheets for 1981 and 1980 indicate a net debt reduction of approximately $10 million, the program provided more than sufficient cash inflows to help cushion the adverse cash impact caused by the building materials segment in a year characterized by a severe drop-off in new housing starts, high interest rates and rising raw material costs which could not be passed on to customers, the company's financial position improved from 1980.

The company's working capital ratio increased in 1981 from 1.46:1 to 1.88:1. This increase primarily reflects the effects of the sales of discontinued businesses, the reduction in short-term debt and the increase in inventories. The significant increase in Accounts Receivable–Other reflects a receivable of $63.9 million for the sale of the reprographics business, which was completed in early January 1982, but effective as of December 31, 1981. Of the total increase in inventories in 1981 of $44.1 million as compared with 1980, $37.6 million, representing a 70% increase, related to the building materials segment. High inventory levels resulted in several plant closings in the latter part of 1981, an industry-wide occurrence. Re-opening of these plants will be dependent on a reduction in current inventory levels and a return of market demand.

The company's overall financial condition was further improved in 1981 by the restructuring of the employee pension fund, as explained in Note 9 of Notes to Consolidated Financial Statements. A dedicated bond portfolio was established that will provide income sufficient to meet actuarially calculated payments to all retirees and vested former employees, including those of the discontinued businesses. This allowed the company to reverse pension liability reserves established for employees of discontinued businesses. In addition, this portfolio and a change in interest assumptions from 6% to 7% have placed the pension plan in a fully funded position with respect to all prior service obligations and lowered pension expenses by $7.5 million in 1981. Future pension expenses will also be lower as a result.

As fully explained in Note 14, the company replaced its existing short-term lines of credit in the first quarter of 1981 with a three-year $225 million revolving credit agreement with declining availability over the term. Interest on these funds is at the prime rate. At December 31, 1981, $72.5 million of these funds were being utilized. The agreement places limitations, among other things, upon dividends, capital expenditures, funded debt and other borrowings. The company is currently negotiating to replace this agreement with a new long-term revolving credit agreement for $75 million.

Capital expenditures in 1981 were $27.6 million and are expected to be about $30 million in 1982. During 1981, the major expansion project at the Dallas, Texas, roofing plant was completed, and the capital expansion program for the granules plants continued. In addition, several major pollution control projects were initiated in 1981 at various plants. At the end of the year, the company had commitments of $11.6 million for approved capital expenditures. Commitments under various capital and operating lease obligations are detailed in Note 15 of Notes to Consolidated Financial Statements.

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Management's Discussion and Analysis of Financial Condition and Results of Operations (continued)

Results of Operations

The company's sales and profit performance from continuing operations decreased in each year for the period 1979 through 1981. These results were directly attributable to the building materials business, which was severely hampered by the depressed state of the building industry.

Consolidated sales decreased by less than 1% in 1980 compared with 1979 and again in 1981 compared with 1980, as additional chemical revenues were more than offset by a significantly lower sales volume in building materials. Inflationary material cost increases in the building materials segment have eroded the consolidated gross margins from 25.1% in 1979 to 22.5% and 17.9% in 1980 and 1981, respectively. Total direct operating profits of the two operating groups fell by 28.7% in 1980 compared with 1979 and by 72.6% in 1981 compared with 1980.

The building materials business, as stated, was severely affected by the adverse economic conditions impacting the building industry, which were caused by high interest rates and a fall-off in new housing starts to 1,101,000 units from 1980's already depressed level of 1,313,000 units. Sales, which declined by 6% in 1980 from 1979 levels, decreased another 5% in 1981, resulting from a 13% lower unit sales volume for roofing products. Direct operating results, which reflected a 54% decrease in profits in 1980, showed a loss of $38.6 million in 1981. These results are primarily attributable to the following:

- Continued increased costs of petroleum-related products and other materials and an inability to pass along cost increases.
- Lower demand which resulted in the shutdown of the Kansas City and Denver roofing plants.
- High interest rates which had an increasingly negative effect on the reroofing market, normally the major part of the company's business.
- A fourth quarter 1981 provision of $15.1 million for anticipated costs relating to the shutdown of certain felt mills.
- Additional expenses relating to commercial roofing.

Management fully believes that this segment will return to its former profitability once the current economic depressants ease and demand for roofing products increases. Also expected to aid in this return to profitability will be the increased utilization of glass mat for production of shingles, thus decreasing the company's reliance on costly petroleum-related products.

Chemical profits for the year 1981 increased 8.8% on a sales increase of 5.8%. This represented an increase in return on chemical assets from 27.3% in 1980 to 28.2% in 1981. Contributing to these results was the Seadrift chemical plant which became operational in late 1980 to manufacture butynediol, a preliminary step in the manufacture of butanediol. Chemical domestic profits increased 24% in 1981 as a result of favorable sales pricing and unit volume increases in specialty chemicals despite a lower sales volume in roofing granules. International direct operating profits were off $3.4 million for the year 1981 primarily due to the increased strength of the U.S. dollar.

As indicated in the five-year data in the Summary of Selected Financial Data, the chemical segment has shown an average yearly sales growth of approximately 15% over the period 1977-1981. Operating profits have averaged more than 20% of sales over the same period. It is expected that this segment will remain strong and continue its growth in sales and profitability. Expanded marketing efforts have been initiated and new products continue to be introduced. In addition, new uses and new customers for existing products have been developed.

Other operating expenses, which increased $13.6 million (12%) in 1980 over 1979, decreased in 1981 by $2.6 million (2%). This decrease was primarily due to the reduction in pension expenses (explained more fully in Note 9) and corporate staff reductions during the year which will more fully impact 1982's expenses. The income tax benefits in 1981, fully detailed in Note 10, consist of tax benefits on domestic losses offset in part by tax expense related to income from foreign operations. The change from a tax rate of 36.4% in 1979 to a tax benefit of 13.7% in 1980 arose primarily from the increased impact of United States investment tax credits, depletion allowances, and the benefits of the Domestic International Sales Corporation on reduced earnings.

For a further review of the effects of inflation on the company's financial statements, see Supplementary Data–Financial Reporting and Changing Prices on page 34.

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Review of Consolidated Financial Information

Summary of Selected Financial Data

Statement of Income information is presented for continuing operations.

	Dollars in Millions except per Share Amounts				
Year Ended December 31	**1981**	1980	1979	1978	1977
Net Customer Sales					
Chemical	**$300.8**	$284.4	$264.3	$217.7	$168.0
Building Materials	**371.7**	392.8	419.4	391.3	338.8
Consolidated Sales	**672.5**	677.2	683.7	609.0	506.8
Direct Operating Profit (Loss)					
Chemical	**56.6**	52.0	62.4	48.4	43.7
Building Materials	**(38.6)**	13.7	29.7	41.3	37.3
Total	**18.0**	65.7	92.1	89.7	81.0
Income (Loss) from Continuing Operations	**(28.2)**	10.3	25.8	28.1	25.0
Primary Earnings (Loss) per Common Share—Continuing Operations	**(2.24)**	.50	1.66	1.83	1.61
Dividends per Common Share	**.80**	.77	.68	.64	.60

The following Balance Sheet amounts pertaining to years before 1980 have not been restated to separately identify amounts applicable to discontinued segments. See Note 1 of Notes to Consolidated Financial Statements.

	Dollars in Millions				
December 31	**1981**	1980	1979	1978	1977
Current Assets	**$337.3**	$482.7	$492.1	$472.2	$464.1
Current Liabilities	**179.6**	330.6	201.5	179.8	186.3
Working Capital	**157.7**	152.1	290.6	292.4	277.8
Property, Plant and Equipment—Net	**196.4**	200.0	308.4	280.6	262.9
Total Assets	**559.8**	698.3	835.6	785.3	762.4
Notes Payable	**17.4**	58.0	17.6	23.6	32.9
Total Long-term Debt	**215.6**	193.5	206.4	196.8	198.4
Shareholders' Equity	**134.7**	122.3	369.0	351.7	329.7

Market For Common Stock

As of February 1, 1982, there were 47,172 holders on record of GAF's outstanding common stock. The following information pertains to the company's common stock, which is traded on the New York Stock Exchange.

Dividends per Common Share

	1981	1980
First Quarter	**$ .20**	$ .17
Second Quarter	**$ .20**	$ .20
Third Quarter	**$ .20**	$ .20
Fourth Quarter	**$ .20**	$ .20

Price Range of Common Stock

	1981		1980	
	High	**Low**	High	Low
First Quarter	**14½**	**11¾**	11⅝	7¾
Second Quarter	**16⅜**	**12¼**	13⅛	8⅛
Third Quarter	**15⅜**	**11¾**	14½	10¾
Fourth Quarter	**15¼**	**12½**	13⅝	9¼

GAF has paid cash dividends on its common stock for 66 consecutive quarters. The company expects to be able to pay future dividends under agreements being discussed with certain banks. See Note 14 of Notes to Consolidated Financial Statements.

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GAF Corporation and Consolidated Subsidiaries
Summary of Significant Accounting Policies
(The following accounting policies apply to the continuing operations of the company.)

Principles of Consolidation
The accounts of all significant subsidiaries of the company are included in the consolidated financial statements. All significant intercompany transactions and balances have been eliminated. A wholly owned captive insurance subsidiary and the 50% ownership of a foreign chemical manufacturing company are carried on the equity method.

Short-term Investments
Short-term investments are valued at cost, which approximates market.

Inventories
Inventories are valued at the lower of cost (principally average) or market.

Property, Plant and Equipment, and Related Depreciation
Depreciation is computed principally on the straight-line method based on the estimated economic lives of the assets.

Beginning in 1979, certain interest charges are capitalized as part of the cost of property, plant and equipment additions. See Note 2 of Notes to Consolidated Financial Statements.

Deferred Income Taxes
Deferred income taxes arise from reporting certain income and expense items in the financial statements in periods different from those in which such amounts are reported for income tax purposes.

Investment Tax Credits
The company accounts for investment tax credits arising since January 1, 1971, as a reduction of the provision for United States income tax (the flow-through method). Investment tax credits which arose prior to that date were deferred and amortized over the estimated service lives of the related assets.

Sale of Tax Benefits
The company accounts for the proceeds from the sale of tax benefits (i.e., investment tax credits and depreciation deductions) pursuant to the leasing provisions of the Economic Recovery Tax Act of 1981 as pre-tax income. See Note 5 of Notes to Consolidated Financial Statements.

Retirement Plans
The company and its subsidiaries have retirement plans covering substantially all employees. The company's policy is to accrue as expense an amount computed by the actuary and to fund at least the minimum amount required by ERISA. See Note 9 of Notes to Consolidated Financial Statements.

Earnings per Common Share
Primary earnings per common share are computed by dividing income (loss), adjusted for preferred stock dividend requirements, by the weighted average number of shares of common stock outstanding during the year. The computation assumes the exercise of outstanding stock options to the extent they are dilutive.

Fully diluted earnings per common share are computed on the assumption (where the effect thereof would be dilutive) that convertible securities outstanding had been converted into shares of common stock. Appropriate adjustments for dividends on preferred stock and interest on convertible notes (net of income tax effect) are made to earnings applicable to common stock for assumed conversions. The computation also assumes the exercise of all dilutive stock options.

Consolidated Statements of Income

Year Ended December 31	1981	1980	1979
Net Sales	**$672,514,000**	$ 677,216,000	$683,749,000
Costs and Expenses			
Cost of products sold	**551,893,000**	524,897,000	511,805,000
Distribution, selling and advertising	**74,844,000**	73,213,000	67,128,000
Research and development	**8,110,000**	8,634,000	7,324,000
General and administrative	**39,117,000**	42,843,000	36,618,000
Interest (Note 2)	**19,153,000**	21,634,000	14,307,000
Total Costs and Expenses	**693,117,000**	671,221,000	637,182,000
Other Income (Charges)			
Provision for plant shutdown costs (Note 3)	**(15,080,000)**	—	—
Other—Net (Notes 4 & 5)	**2,644,000**	3,082,000	(5,981,000)
Total Other Income (Charges)	**(12,436,000)**	3,082,000	(5,981,000)
Income (Loss) from Continuing Operations Before Income Taxes (Benefits)	**(33,039,000)**	9,077,000	40,586,000
Income Taxes (Benefits) (Note 10)	**(4,803,000)**	(1,246,000)	14,758,000
Income (Loss) from Continuing Operations	**(28,236,000)**	10,323,000	25,828,000
Discontinued Segments (Note 1)			
Operating income, net of income tax benefits of $466,000 in 1980 and $5,287,000 in 1979	—	441,000	2,355,000
Estimated Income (Loss) from disposition, net of income taxes (benefits) of $15,707,000 in 1981 and ($10,460,000) in 1980	**54,296,000**	(244,240,000)	—
Income (Loss) from Discontinued Segments	**54,296,000**	(243,799,000)	2,355,000
Net Income (Loss)	**$ 26,060,000**	$(233,476,000)	$ 28,183,000
Weighted Average Number of Common and Common Equivalent Shares Outstanding	**14,078,000**	13,497,000	13,386,000
Earnings per Common Share			
Primary			
Continuing	**$(2.24)**	$ .50	$1.66
Discontinued	**3.86**	(18.07)	.17
Net Income (Loss)	**$ 1.62**	$(17.57)	$1.83
Fully Diluted (Note 6)			
Continuing	**$(1.57)**	—	$1.49
Discontinued	**3.07**	—	.13
Net Income (Loss)	**$ 1.50**	—	$1.62

Consolidated Statements of Retained Earnings

Year Ended December 31	1981	1980	1979
Balance, January 1	**$ 53,609,000**	$ 301,092,000	$285,613,000
Net Income (Loss)	**26,060,000**	(233,476,000)	28,183,000
Less cash dividends:			
Preferred stock ($1.20 per share)	**3,242,000**	3,625,000	3,635,000
Common stock (per share: 1981–$.80; 1980–$.77; 1979–$.68)	**11,183,000**	10,382,000	9,069,000
Balance, December 31	**$ 65,244,000**	$ 53,609,000	$301,092,000

See Summary of Significant Accounting Policies and Notes to Consolidated Financial Statements.

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Consolidated Balance Sheets

December 31	1981	1980
Assets		
Current Assets		
Cash	**$ 10,385,000**	$ 13,342,000
Short-term investments	**2,963,000**	8,593,000
Accounts receivable—trade, less allowance for doubtful accounts—1981, $2,828,000; 1980, $1,842,000	**78,106,000**	80,638,000
Accounts receivable—other (Note 1)	**70,014,000**	6,681,000
Inventories—net:		
Finished goods	**87,169,000**	54,735,000
Work in process	**24,121,000**	16,410,000
Raw materials and supplies	**36,428,000**	32,477,000
Total Inventories	**147,718,000**	103,622,000
Prepaid expenses	**4,806,000**	4,123,000
Assets of discontinued segments, at estimated net realizable value (Note 1)	**23,272,000**	265,723,000
Total Current Assets	**337,264,000**	482,722,000
Property, Plant and Equipment, at cost (Note 15)		
Land and land improvements	**15,941,000**	13,757,000
Buildings and building equipment	**60,780,000**	58,005,000
Machinery and equipment	**225,333,000**	218,635,000
Construction in progress	**11,091,000**	17,236,000
Total Property, Plant and Equipment	**313,145,000**	307,633,000
Less accumulated depreciation	**116,735,000**	107,616,000
Property, Plant and Equipment—Net	**196,410,000**	200,017,000
Cost in Excess of Net Assets Acquired	**5,744,000**	5,744,000
Other Assets (Note 1)	**20,342,000**	9,800,000
Total Assets	**$559,760,000**	$698,283,000

See Summary of Significant Accounting Policies and Notes to Consolidated Financial Statements.

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December 31	1981	1980
Liabilities and Shareholders' Equity		
Current Liabilities		
Notes payable (Note 14)	**$ 17,448,000**	$ 57,989,000
Current portion of long-term debt (Note 14)	**21,909,000**	45,463,000
Accounts payable:		
Trade	**69,809,000**	85,207,000
Other	**5,421,000**	8,825,000
Accrued liabilities (Note 1)	**63,406,000**	127,865,000
Income taxes payable	**1,559,000**	5,307,000
Total Current Liabilities	**179,552,000**	330,656,000
Long-term Debt Less Current Portion (Note 14)	**193,662,000**	148,076,000
Other Liabilities (Note 1)	**51,859,000**	97,204,000
Total Liabilities	**425,073,000**	575,936,000
Commitments and Contingent Liabilities (Note 15)		
Shareholders' Equity (Notes 12, 13 & 14)		
Preferred stock, $1 par value; authorized 6,000,000 shares; $1.20 convertible series issued—1981, 2,611,784 shares; 1980, 3,068,201 shares; at assigned value of $1.25 per share (liquidation value 1981, $69,723,060)	**3,265,000**	3,835,000
Common stock, $1 par value, authorized 25,000,000 shares: issued—1981, 14,387,721 shares; 1980, 13,817,202 shares	**14,388,000**	13,817,000
Additional paid-in capital	**54,360,000**	53,976,000
Retained earnings	**65,244,000**	53,609,000
Total	**137,257,000**	125,237,000
Less stock held in treasury, at cost:		
Common—1981, 211,467 shares; 1980, 236,887 shares	**1,638,000**	1,958,000
Preferred—76,400 shares in 1981 and 1980	**932,000**	932,000
Total Shareholders' Equity	**134,687,000**	122,347,000
Total Liabilities and Shareholders' Equity	**$559,760,000**	$698,283,000

See Summary of Significant Accounting Policies and Notes to Consolidated Financial Statements

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Consolidated Statements of Changes in Financial Position*

Year Ended December 31	1981	1980	1979
Cash and Short-term Investments, beginning of year	**$ 21,935,000**	$ 19,078,000	$ 37,009,000
Source (Use) of Funds:			
Income (Loss) from Continuing Operations	**(28,236,000)**	10,323,000	25,828,000
Charges (credits) not affecting funds:			
Depreciation	**20,728,000**	17,697,000	15,725,000
Deferred income taxes	**(10,657,000)**	(329,000)	2,617,000
Plant shutdown costs	**15,080,000**	—	—
Other	**6,437,000**	—	—
Total from continuing operations	**3,352,000**	27,891,000	44,170,000
Income (Loss) from Discontinued Segments	**54,296,000**	(243,799,000)	2,355,000
Charges (credits) to discontinued segments not affecting funds	**(54,296,000)**	262,456,000	13,465,000
Total from discontinued segments	**—**	18,657,000	15,820,000
Total funds from operations	**3,352,000**	46,548,000	59,990,000
Cash proceeds from sales of discontinued businesses	**107,498,000**	11,920,000	—
Additions to property, plant and equipment	**(27,579,000)**	(48,154,000)	(58,804,000)
Other working capital items**	**(54,619,000)**	(145,986,000)	(6,466,000)
Other	**(4,902,000)**	124,448,000***	(5,211,000)
Total source (use) before financing and investment activity	**23,750,000**	(11,224,000)	(10,491,000)
Financing and investment activity:			
Increase (decrease) in notes payable	**(40,541,000)**	40,339,000	(5,958,000)
Increase in long-term debt	**74,282,000**	8,441,000	28,514,000
Reductions in long-term debt	**(52,250,000)**	(21,294,000)	(18,967,000)
Cash dividends	**(14,425,000)**	(14,007,000)	(12,704,000)
Other	**597,000**	602,000	1,675,000
Total source (use) from financing and investment activity	**(32,337,000)**	14,081,000	(7,440,000)
Increase (decrease) in cash and short-term investments	**(8,587,000)**	2,857,000	(17,931,000)
Cash and Short-term Investments, end of year	**$ 13,348,000**	$ 21,935,000	$ 19,078,000

*This statement was changed in 1981 from the working capital to the cash format in order to provide the reader with detailed information on the source and use of funds. As a result, certain amounts for 1980 and 1979 have been restated.

**Other working capital items:

Accounts receivable—trade	**$ 2,532,000**	$ 107,948,000	$ (20,444,000)
Accounts receivable—other	**(63,333,000)**	3,326,000	8,672,000
Inventories	**(44,096,000)**	160,588,000	(53,765,000)
Prepaid expenses	**(683,000)**	5,863,000	1,084,000
Income tax benefits	**—**	256,000	4,182,000
Assets of discontinued segments	**128,325,000**	(403,620,000)	22,448,000
Accounts payable	**(18,802,000)**	(15,818,000)	30,717,000
Accrued liabilities	**(54,814,000)**	(4,834,000)	(451,000)
Income taxes payable	**(3,748,000)**	305,000	1,091,000
Net use	**$ (54,619,000)**	$ (145,986,000)	$ (6,466,000)

***Consists primarily of net property, plant and equipment transferred to assets of discontinued segments.

See Summary of Significant Accounting Policies and Notes to Consolidated Financial Statements.

Notes to Consolidated Financial Statements

1 Discontinued Segments

In 1980 the company decided to discontinue a number of businesses including its reprographics, photographic graphic arts products, pictorial products, resilient flooring and certain other businesses. Also included in the discontinuance program was a latex plant, sold in December 1980, and the company's x-ray film and related chemical businesses that were terminated in March 1980.

The pictorial products, graphic arts, resilient flooring, vinyl siding and paper and millboard businesses were sold in 1981. The reprographics business was sold on January 8, 1982, effective as of December 31, 1981, which substantially completes the program. A receivable of $63.9 million relating to this sale is included in Accounts Receivable—Other. In addition, long-term notes receivable of $14.5 million, relating to the sales of reprographics and other discontinued businesses are included in Other Assets.

As of December 31, 1980, a provision of $254.7 million ($244.2 million after tax benefits of $10.5 million) was recorded and consisted of a reserve for the loss on disposition of assets and a liability for anticipated phase-out costs. This reserve and liability were reevaluated in 1981 in connection with the sales of these businesses and determined to be more than needed to cover anticipated costs. The excess of $43.6 million (after taxes of $6.5 million) was restored to Estimated Income (Loss) from disposition of discontinued segments. Estimated Income (Loss) from discontinued segments also includes $10.7 million income (after taxes of $9.2 million), consisting primarily of pension reserves relating to 1977 discontinuances no longer required (see also Note 9). Activity in this reserve and liability is summarized below.

	Reserve For Loss On Disposition of Assets	Liability For Phase-Out Costs	Total
	Dollars in Millions		
Provision recorded in 1980	$127.0	$127.7	$254.7
Activity during 1980	(1.0)	(6.0)	(7.0)
Balance December 31, 1980	126.0	121.7	247.7
Activity during 1981	(114.3)	(30.3)	(144.6)
Adjustment of balance	6.6	(56.7)	(50.1)
Balance December 31, 1981	$ 18.3	$ 34.7	$ 53.0

At December 31, 1981, the current portion of the liability for phase-out costs is $15.1 million and is included in Accrued Liabilities; the noncurrent portion of $19.6 million is included in Other Liabilities. Comparable current and long-term amounts at December 31, 1980 were $68.1 million and $53.6 million, respectively.

Operating income of the discontinued segments shows the results prior to the effective dates of the discontinuances. Operating results subsequent to the effective dates of the discontinuances have been charged to the liability for phase-out costs. Sales applicable to businesses discontinued during 1980 and 1979 prior to the dates at which they were reported as discontinued were $553.4 million for 1980 and $529.5 million for 1979.

The assets of the discontinued segments have been reclassified, after the dates of their discontinuances, to remove them from their historic classifications and to separately identify them at their net realizable value. The amount of assets applicable to discontinued segments is presented below.

December 31	**1981**	1980
	Dollars in Millions	
Accounts Receivable—Net	**$ 13.8**	$ 80.2
Inventories	**7.2**	148.5
Property, Plant and Equipment—Net	**18.0**	135.0
Other	**2.6**	28.0
Total Assets	**41.6**	391.7
Less reserve for loss on disposition of assets	**18.3**	126.0
Total Assets at Estimated Net Realizable Value	**$ 23.3**	$265.7

2 Interest Expense

Interest expense for continuing operations for the years ended December 31, 1981, 1980 and 1979 was determined as follows.

For the year	**1981**	1980	1979
	Dollars in Thousands		
Total interest incurred	**$21,371**	$24,709	$16,992
Less interest capitalized	**2,218**	3,075	2,685
Interest expense	**$19,153**	$21,634	$14,307

3 Plant Shutdown Costs

The company in December 1981 provided $15.1 million for felt mill shutdowns, primarily for the write-off of related buildings and equipment for certain felt mills in the building materials segment.

4 Foreign Exchange

Pre-tax foreign exchange gains (losses) on continuing operations are included in Other Income (Charges) as follows:

For the year	**1981**	1980	1979
	Dollars in Thousands		
Pre-tax			
Translation	**$ 1,772**	$ 1,867	$ (765)
Forward exchange contracts	**545**	633	(3,284)
Payable/receivable	**(1,151)**	(1,120)	(40)
Total	**$ 1,166**	$ 1,380	$(4,089)
After-tax			
Translation	**$ 1,772**	$ 1,867	$ (765)
Forward exchange contracts	**386**	323	(1,675)
Payable/receivable	**(511)**	(610)	18
Total	**$ 1,647**	$ 1,580	$(2,422)

Taxes related to foreign exchange are included in Income Taxes (Benefits). Generally, results of balance sheet translations are not tax effected, whereas the results of forward exchange contracts are subject to tax.

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5 Other Income (Charges)
The company recognized $2.0 million of income in 1981 as a result of the sale of tax benefits pursuant to the "safe harbor" leasing provisions of the Economic Recovery Tax Act of 1981.

The net operating results of a wholly owned, captive insurance subsidiary and the company's share of the net results of its 50% ownership in a foreign chemical manufacturing company are recorded in Other Income (Charges) on the Consolidated Statements of Income. Equity method results showed losses of $606,000 and $966,000 in 1981 and 1980, respectively, and income of $234,000 in 1979. Foreign exchange gains and losses related to these investments are included within amounts reported in Note 4.

Included in Other Income (Charges) for the year 1979 is a loss of $5,966,000 on silver future transactions.

6 Per Share Information
Fully diluted earnings per share assume conversion of the 5% and 5½% convertible subordinated notes and the exercise of stock options into shares of common stock. Assumed conversions for the 1980 net loss per share would have been anti-dilutive and have therefore been excluded.

7 Schedule of Business Segments*

	Dollars in Millions		
Year Ended December 31	**1981**	1980	1979
Sales			
Chemical	**$325.4**	$308.2	$290.5
Less intersegment sales**	**24.6**	23.8	26.2
Net Chemical	**300.8**	284.4	264.3
Building Materials	**371.7**	392.8	419.4
Consolidated Sales	**$672.5**	$677.2	$683.7
Direct Operating Profit (Loss)			
Chemical	**$ 56.6**	$ 52.0	$ 62.4
Building Materials	**(38.6)**	13.7	29.7
Total	**18.0**	65.7	92.1
Corporate and Interest Expenses	**(51.0)**	(56.6)	(51.5)
Income (Loss) from Continuing Operations Before Income Taxes	**$ (33.0)**	$ 9.1	$ 40.6
Identifiable Assets			
Chemical	**$200.6**	$190.4	$182.6
Building Materials	**222.4**	200.5	348.5
Photo & Repro	**—**	—	239.0
Corporate	**113.5**	41.7	65.5
Assets of Discontinued Segments	**23.3**	265.7	—
Total Assets	**$559.8**	$698.3	$835.6
Additions to Property, Plant and Equipment			
Chemical	**$ 12.2**	$ 21.9	$ 15.3
Building Materials	**14.0**	23.9	34.6
Photo & Repro	**—**	—	6.3
Corporate	**1.4**	2.4	2.6
Total	**$ 27.6**	$ 48.2	$ 58.8
Depreciation			
Chemical	**$ 9.8**	$ 8.6	$ 8.2
Building Materials	**9.4**	7.8	6.1
Corporate	**1.5**	1.5	1.4
Total	**$ 20.7**	$ 17.9	$ 15.7

*Statement of Income information is presented for continuing operations. Balance Sheet amounts for 1979 have not been restated. See Note 1.
**Intersegment sales are recorded at the same prices charged to unaffiliated customers. Intersegment sales by the building materials segment were negligible.

8 Geographic Information*

Information with respect to operations by geographic area is as follows

For the year	United States	Western Europe	Other	Eliminations and Other	Total Consolidated
	Dollars in Millions				
1981					
Sales	$635.3	$ 48.0	$ 16.4	$ (27.2)	$672.5
Less intergeographic sales**	26.4	0.8	—	(27.2)	—
Sales to Unaffiliated Customers	608.9	47.2	16.4	—	672.5
Direct Operating Profit	6.1	8.8	3.1	—	18.0
Corporate and Interest Expenses					(51.0)
Income (Loss) from Continuing Operations Before Income Taxes					(33.0)
Identifiable Assets	502.5	24.2	9.8	23.3***	559.8
1980					
Sales	$636.7	$ 67.5	$ 15.0	$ (42.0)	$677.2
Less intergeographic sales**	29.6	12.4	—	(42.0)	—
Sales to Unaffiliated Customers	607.1	55.1	15.0	—	677.2
Direct Operating Profit	51.0	12.5	2.2	—	65.7
Corporate and Interest Expenses					(56.6)
Income from Continuing Operations Before Income Taxes					9.1
Identifiable Assets	396.0	28.8	7.8	265.7***	698.3
1979					
Sales	$648.8	$ 63.8	$ 9.7	$ (38.6)	$683.7
Less intergeographic sales**	27.7	10.9	—	(38.6)	—
Sales to Unaffiliated Customers	621.1	52.9	9.7	—	683.7
Direct Operating Profit	75.4	15.7	1.0	—	92.1
Corporate and Interest Expenses					(51.5)
Income from Continuing Operations Before Income Taxes					40.6
Identifiable Assets	640.8	168.6	26.2	—	835.6

*Geographic Information is presented for continuing operations for information pertaining to the Statements of Income. Asset amounts for 1979 have not been restated. See Note 1.

**Intergeographic sales are recorded at prices, above cost, as negotiated between the operating units.

***Assets of discontinued segments at estimated net realizable value. See Note 1.

9 Retirement Plans

In June 1981, the company announced a change in the asset mix of the employee pension fund as a result of the restructuring program. A dedicated bond portfolio, with an assumed interest rate of return of 12% which approximates the yield to maturity on the portfolio, was established and will provide income sufficient to meet the actuarially calculated payments to all retirees and vested former employees, including those of the discontinued businesses. At the same time, the company adopted a 1% increase in the assumed rate of return on plan assets and salary increases to 7% and 6%, respectively, for plan participants. These changes eliminated the unfunded prior service cost, resulted in an overfunded position for the value of vested benefits and generated an actuarial gain which is being amortized over ten years. The effect was a decrease in the loss from continuing operations for 1981 of $7,500,000, without tax benefit, or $.53 Primary—Continuing Earnings per Common Share.

Phase-out costs accrued in connection with the 1977 and 1980 discontinuance programs included amounts for future pension costs for which the remaining aggregate liability was $43,842,000 at December 31, 1980. The company is no longer obligated to fund any benefits relating thereto and, accordingly, the $43,842,000 balance, less related taxes of $7,747,000, was restored to Estimated Income from Disposition during 1981, or $2.56 Primary—Discontinued Earnings per Common Share.

The cost of employee retirement benefits for continuing operations was $2,347,000 in 1981, $9,806,000 in 1980 and $8,613,000 in 1979. A comparison of the accumulated plan benefits and plan net assets for the company's domestic defined benefit plans is presented below.

	Dollars in Thousands		
	1981	1980	1979
Actuarial present value of accumulated plan benefits			
Vested	**$172,969**	$227,609	$214,759
Non-Vested	**5,784**	10,303	10,553
Total	**$179,753**	$237,912	$225,312
Plan assets available for benefits	**$223,119**	$179,479	$151,743
Assumed rate of return	**7%**	6%	6%
Plan valuation date	**1/1/81**	1/1/80	1/1/79

10 Income Taxes

Provision has not been made for United States income taxes on unremitted earnings of foreign subsidiaries of $16,187,000, as it is management's intention to reinvest such earnings indefinitely. Any United States taxes payable on foreign earnings which may be remitted in the future are expected to be substantially reduced by the combined effects of a net operating loss carryforward and foreign tax credits. United States income taxes have not been provided on the unremitted earnings of the Domestic International Sales Corporation subsidiary aggregating $14,077,000 through December 31, 1981, since the company intends to postpone indefinitely the remittance of such earnings.

Income (loss) from continuing operations before income taxes consists of domestic and foreign income (loss) as follows:

	Dollars in Thousands		
For the year	**1981**	1980	1979
Domestic	**$(44,053)**	$(5,572)	$23,986
Foreign	**11,014**	14,649	16,600
Total Income (Loss) from Continuing Operations Before Income Taxes	**$(33,039)**	$9,077	$40,586

The provision (benefit) for income taxes on continuing operations consists of the following:

	Dollars in Thousands		
For the year	**1981**	1980	1979
United States—current	**$ —**	$(7,245)	$6,657
United States—deferred	**(10,657)**	4,590	2,874
United States investment tax credits	**—**	(4,679)	(3,022)
Amortization of deferred United States investment tax credits arising prior to 1971	**—**	(432)	(572)
Foreign—current	**5,554**	6,[illegible]90	7,534
Foreign—deferred	**—**	5	(257)
State	**300**	125	1,544
Total Income Taxes (Benefits)	**$ (4,803)**	$(1,246)	$14,758

Income taxes (benefits) on continuing operations for the years 1981, 1980 and 1979 were less than the amounts computed by applying the U.S. Federal statutory income tax rate to income before taxes. The reasons for these differences are as follows:

	Dollars in Thousands		
For the year	**1981**	1980	1979
Tax (benefit) at statutory rate	**$(15,198)**	$4,175	$18,670
Adjustments			
Operating loss carryforward*	**10,660**	—	—
United States investment tax credits	**—**	(5,111)	(3,594)
Domestic International Sales Corporation and depletion allowances	**(871)**	(941)	(942)
Other—net	**606**	631	624
Total Income Taxes (Benefits)	**$ (4,803)**	$(1,246)	$14,758

*Amount represents benefit of book operating loss to be recognized when realized for income tax purposes.

The principal sources (uses) of United States deferred income taxes applicable to continuing operations were:

	Dollars in Thousands		
For the year	**1981**	1980	1979
Tax depreciation over amount reported in Consolidated Statements of Income	**$ —**	$2,908	$1,960
Reversal of tax effect of 1977 reserves	**(9,147)**	—	—
Interest expense capitalized	**—**	1,223	1,187
Foreign exchange translation	**—**	129	(955)
Other—net	**(1,510)**	330	682
Total	**$(10,657)**	$4,590	$2,874

For income tax reporting purposes, operating loss carryforwards of approximately $116 million are available at December 31, 1981, for offset against future consolidated taxable income. Approximately $92 million is applicable to the United States and the remainder is applicable to consolidated subsidiaries located principally in Western Europe. The United States loss will be available for future utilization through 1996 and the foreign loss will expire at various dates through 1991. In addition, United States investment tax credit carryforwards of approximately $4.7 million are available for offset against future tax liabilities through 1995. Use of these carryforwards is dependent on future taxable income in the United States and Western Europe.

For 1979, the income tax benefit on discontinued operations includes $3.2 million resulting from a 1979 change in United Kingdom tax laws related to inventories.

11 Supplementary Financial Information

The following expenses of continuing operations are included in the Consolidated Statements of Income.

	Dollars in Thousands		
For the year	**1981**	1980	1979
Maintenance and repairs	**$45,504**	$42,436	$40,154
Rent on operating leases	**8,120**	13,443	12,618

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12 Capital Stock

The $1.20 convertible preferred stock, dividends on which are cumulative, is convertible at any time into common stock at the rate of 1¼ shares of common stock for each share of preferred. The company may redeem the preferred stock at $27.50 per share.

Transactions in common stock held in treasury were as follows:

	Dollars in Thousands		
	1981	1980	1979
Balance, January 1	**$1,958**	$2,682	$4,531
Repurchase of 105,100 shares in 1981, 10,600 shares in 1980 and 3,500 shares in 1979 pursuant to the stock purchase plan	**618**	61	19
Issuance from treasury of 130,520 shares in 1981, 97,500 shares in 1980 and 246,920 shares in 1979 (in connection with sales under the stock option plan and the restricted stock purchase plan)	**(938)**	(785)	(1,868)
Balance, December 31	**$1,638**	$1,958	$2,682

As a result of the above issuance of treasury shares, additional paid-in capital increased $276,000 in 1981 and decreased $123,000 and $174,000 in 1980 and 1979, respectively.

The shares of common stock reserved for issuance at December 31, 1981 and 1980 were as follows:

Reserved for	**1981**	1980
Conversion of $1.20 convertible preferred stock	**3,264,730**	3,835,251
Conversion of convertible subordinated notes	**415,523**	441,046
Exercise under stock option and purchase plans	**824,550**	1,169,370
Total	**4,504,803**	5,445,667

During 1981, 456,417 shares of preferred stock, assigned value of $570,521, were converted into 570,519 shares of common stock; during 1980, 37,476 shares of preferred stock, assigned value of $46,845, were converted into 46,843 shares of common stock; during 1979, 90 shares of preferred stock were converted into 112 shares of common stock.

13 Stock Option and Stock Purchase Plans

The company's stock option plans provide for the granting of options to key employees to purchase common stock of the company at not less than 100% of the fair market value at the date of grant. Under the terms of the 1975 non-qualified plan, options for 800,000 shares of common stock may be granted during a ten-year period ending February 11, 1985. Options granted to date are exercisable one year after grant and expire after 10 years. The plan provides for stock appreciation rights, wherein an option holder may request "surrender" of the option in exchange for payment (in cash or stock) by the company of the difference between the option and market prices on the date of surrender. The requested surrender of an option may be granted or denied at the discretion of the company's Stock Option Committee.

Authority to grant options under the 1965 qualified plan expired on March 31, 1975. Options granted under this plan expired five years from the date of grant.

Transactions affecting options under these plans are as follows:

	Number of Shares	Average Option Price
Outstanding January 1, 1979	403,900	$ 9.64
Granted	317,000	11.30
Exercised and surrendered	(89,130)	9.60
Terminated	(13,100)	10.29
Outstanding December 31, 1979	618,670	10.48
Granted	132,000	11.50
Exercised	(22,500)	10.26
Terminated	(115,500)	9.87
Outstanding December 31, 1980	612,670	10.82
Granted	99,000	14.86
Exercised	(76,020)	10.64
Terminated	(61,500)	12.27
Outstanding December 31, 1981	574,150	11.39

Of the total options outstanding at December 31, 1981, 1980 and 1979, respectively, 488,650, 480,670 and 305,670 were exercisable. Options for 82,000, 119,500 and 238,000 shares were available for grant at December 31, 1981, 1980 and 1979, respectively.

Under the provisions of the company's 1969 restricted and unrestricted stock purchase plan, 650,000 shares of common stock were authorized for sale to key employees. The plan currently provides that restricted and unrestricted shares may be sold at prices which are not less than 50% and 80%, respectively, of the closing market price preceding the date of grant. Under certain conditions, the company has the right to repurchase restricted shares of common stock at the original selling price.

The excess of quoted market value at the date of grant over the aggregate sales price for restricted shares sold is amortized by charges to income over the restricted period. As a result of these charges, additional paid-in capital has been increased by $108,000, $199,000 and $138,000 in 1981, 1980 and 1979, respectively. The balance to be amortized through 1989 amounted to $902,000, $1,183,000 and $1,012,000 at December 31, 1981, 1980 and 1979, respectively.

14 Debt and Dividend Restrictions

Information regarding short-term debt for the years 1979-1981 is:

	Dollars in Thousands		
	1981	1980	1979
As of December 31			
Balance outstanding	**$17,448**	$ 57,989	$17,650
Average interest rate	**16.5%**	19.2%	12.7%
For the year			
Average short-term debt outstanding	**$35,516**	$ 95,391	$51,416
Maximum short-term debt outstanding at any month end	**$85,297**	$130,701	$76,883
Average interest rate	**16.2%**	17.7%	11.5%

The average amount outstanding during the period was computed by dividing the total of the monthly outstanding principal balances by 12. The average interest rate for the year was computed using the weighted average interest rate on outstanding balances at each month-end.

Long-term debt at December 31, 1981 and 1980 was as follows:

	Dollars in Thousands	
	1981	1980
9¼% senior notes due March 31, 1987 with annual scheduled principal repayments	**$ 53,700**	$ 60,500
8¼% senior notes due January 15, 1992 with annual scheduled principal repayments	**32,100**	35,300
Revolving credit agreement	**72,500**	
5¾% sinking fund debentures due December 1, 1987, with annual sinking fund payments of $2,500,000 due on each December 1. The balance at December 31, 1981, was net of $20,334,000 held in treasury which may be used to accommodate future sinking fund requirements	**4,666**	15,902
Financing from Irish banks	**—**	21,055
Tax-exempt industrial revenue bonds which bear interest at rates of 4% to 7¼% and mature at various dates to 2004	**22,927**	23,490
5% convertible subordinated notes due April 1, 1994, with optional annual repayments beginning April 1, 1990	**8,200**	8,200
5½% convertible subordinated notes due April 1, 1983, with optional annual repayments of either $200,000 on each April 1 through 1982 and the balance of $1,267,000 payable April 1, 1983, or $733,000 payable on April 1, 1982 and the balance of $734,000 payable on April 1, 1983	**1,467**	2,200
Other notes which bear various interest rates and mature at dates to 1993	**6,770**	10,834
Obligations under capital leases (See Note 15)	**13,241**	16,058
Total	**215,571**	193,539
Less current portion	**21,909**	45,463
Long-term debt, less current portion	**$193,662**	$148,076

The 5% convertible subordinated notes are convertible into shares of common stock at any time at a conversion price of $22.50 per share (subject to antidilution adjustments in specified circumstances).

The 5½% convertible subordinated notes are currently convertible into shares of common stock at a conversion price of $28.72 per share (subject to antidilution adjustments in specified circumstances) only in connection with certain prepayments. All other conversion rights lapsed in 1976.

Cash requirements to meet maturing long-term debt obligations over the next five years are presented below. Debt of $72.5 million incurred under the revolving credit agreement has been included in the 1983 amount based upon its term.

1982	$21,909,000	1985	$10,302,000
1983	$95,866,000	1986	$10,028,000
1984	$20,635,000		

To provide for its working capital needs during the discontinuance program described in Note 1, the company in the first quarter 1981 entered into a $225,000,000 revolving credit agreement, terminating December 31, 1983, with a group of banks. This agreement, which replaced the company's domestic short-term lines of credit in effect at December 31, 1980, provides for a declining availability of credit over its term. The company, effective October 20, 1981, exercised its right permanently to reduce the aggregate commitments of the banks under this credit agreement to $170,000,000 and further reduced the commitments to $120,000,000 in January 1982. Interest on the funds is at the prime rate. Under the agreement, a commitment fee of ½ of 1% per annum is charged on the daily average unused portion of the commitments and a facility fee of ½ of 1% per annum is charged on the commitments, whether used or unused. The agreement contains provisions which, among other things, require the maintenance of minimum working capital and net worth, limit the amount of debt and capital expenditures and condition the availability of loans on achieving certain financial results projected for the discontinuance program.

The company is currently negotiating to replace the above agreement with a new long-term revolving credit agreement for $75 million.

Also, in the first quarter 1981 there became effective amendments, negotiated in connection with the discontinuance program, to certain other long-term debt instruments. Under the amendments, the scheduled principal payments were accelerated, restrictions relating to dividends, debt, leases and maintenance of working capital were restructured, and a new provision limiting the company's investments was inserted.

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Dividends are restricted under the above and certain other loan agreements, including the revolving credit agreement. Under the most restrictive of these provisions, $5,320,000 of retained earnings were available at December 31, 1981 for future dividends. In March 1982 the company obtained waivers from certain holders of its long-term debt relating to the restrictions on dividends. Under the terms of the waivers, the company may declare and pay dividends on its common and preferred stock for the second quarter of 1982. Discussions are under way with the banks for a new long-term revolving credit agreement pursuant to which the company could declare further dividends.

15 Commitments and Contingent Liabilities
Capitalized leases for continuing operations of $9,291,000 and $9,769,000 are included in Property, Plant and Equipment—Net at December 31, 1981 and 1980, respectively. The present value of future net minimum lease payments is reflected as long-term debt (see Note 14).

The most significant capital lease is for the administrative headquarters located in Wayne, N.J. The amortization expense associated with assets recorded under capital leases is included in depreciation expense. The company also has operating leases for transportation and data processing equipment and for other buildings.

Future minimum lease payments for continuing properties held under long-term noncancelable leases as of December 31, 1981 are as follows:

	Dollars in Thousands	
Minimum Payments	Capital Leases	Operating Leases
1982	$ 1,864	$ 6,346
1983	1,802	2,980
1984	1,739	1,416
1985	1,677	404
1986	1,614	131
Later Years	13,273	281
Total minimum payments	21,969	$11,558
Less interest included above	8,728	
Present value of net minimum lease payments	$13,241	

The company had commitments of approximately $11,612,000 at December 31, 1981, for the acquisition of property, plant and equipment for its continuing operations.

At December 31, 1981, there were various pending lawsuits and claims against the company relating to matters arising from its business. In the opinion of management, the ultimate disposition of such matters will not have a material adverse effect on the company's consolidated financial position.

Auditors' Opinion

Deloitte
Haskins Sells

TO THE SHAREHOLDERS AND BOARD OF DIRECTORS OF GAF CORPORATION:

We have examined the consolidated balance sheets of GAF Corporation and its consolidated subsidiaries as of December 31, 1981 and 1980 and the related consolidated statements of income, retained earnings and changes in financial position for each of the three years in the period ended December 31, 1981. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our report dated February 12, 1981, our opinion on the 1980 consolidated financial statements was qualified as being subject to the effects of any adjustments which might result upon consummation of the company's plan of disposal of certain of its operations. As explained in Note 1 to the financial statements, the company's discontinuance program was substantially completed during 1981 and portions of the reserve for loss on disposition of assets and of the liability for phase-out costs, established during 1980 but no longer considered necessary, have been restored to income in 1981. Accordingly, our present opinion on the 1980 consolidated financial statements, as expressed herein, is different from that expressed in our previous report.

In our opinion, such consolidated financial statements present fairly the financial position of the companies at December 31, 1981 and 1980 and the results of their operations and the changes in their financial position for each of the three years in the period ended December 31, 1981, in conformity with generally accepted accounting principles consistently applied.

Deloitte Haskins & Sells

New York, New York 10048
February 9, 1982

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Financial Reporting and Changing Prices

In accordance with the Financial Accounting Standards Board Statement No. 33, "Financial Reporting and Changing Prices," the following supplementary information is presented to reflect the estimated impact of inflation on the company's earnings from continuing operations. The company's historical cost financial data have been adjusted for the effects of general inflation on inventories and property, plant and equipment (constant dollar basis) and for the effects of changes in specific prices on those assets (current cost basis). As a result, the impact on net income only reflects adjustments to depreciation expense and cost of products sold. Sales and other costs and expenses, including income taxes, have not been adjusted.

The management of GAF cautions the reader in interpreting this supplementary data due to the required use of numerous assumptions and estimates in preparing the information. This data should therefore be construed only as indicators of the effects of inflation as opposed to precise measurements.

Constant Dollar Information

Constant dollar accounting is a method of reporting financial data in dollars having an equal (i.e. constant) general purchasing power. As required, this information has been compiled by adjusting the historical costs of inventories and property, plant and equipment for changes in the Consumer Price Index for All Urban Consumers.

Current Cost Information

The current cost method adjusts historical costs of the company's inventories and property, plant and equipment to reflect changes in specific prices (current cost) of producing those same inventories or replacing the assets at the balance sheet date. Plant and equipment current costs were estimated by adjusting historical costs by externally generated industrial price indexes. Inventory costs were developed using current manufacturing costs. Inventory costs included in the Cost of Products Sold were determined on average current costs during the year.

Under both methods, depreciation expense was adjusted based on the restated asset values using the same estimated useful lives and depreciation rates used in the primary financial statements.

Other Information

Reflecting the adverse impact of inflation, the adjusted earnings under both the constant dollar and current cost methods are lower than the results from continuing operations reported in the primary financial statements. However, it should be noted that the guidelines established by Statement No. 33 specify that the gain from the decline in purchasing power of net monetary liabilities held during the year ($21.7 million) may not be aggregated with the adjusted earnings. This gain arises because during 1981 the company had more liabilities which were fixed in amount of dollars to be repaid than it had assets similarly fixed in amount of dollars to be received. While this unrealized gain does not represent dollars which will be received in the future, it does represent an important hedge against inflation, as this net monetary liability position will be paid in dollars which have a lower purchasing power than the dollars originally received in return for the obligations.

Consolidated Statement of Income from Continuing Operations Adjusted for Changing Prices (Unaudited)
For the year ended December 31, 1981
(Dollars in Thousands)

	As Reported in the Primary Statements (Historical Cost)	Adjusted for General Inflation (Constant Dollar)	Adjusted for Changes in Specific Prices (Current Cost)
Net Sales	$672,514	$672,514	$672,514
Cost of Products Sold (1)	534,259	544,579	540,086
Depreciation	20,728	33,641	35,410
Other Expenses	131,413	131,413	131,413
Interest	19,153	19,153	19,153
Income Tax Benefit	(4,803)	(4,803)	(4,803)
	700,750	723,983	721,259
Loss from Continuing Operations	$ (28,236)	$ (51,469)	$ (48,745)
Purchasing power gain on net monetary liabilities held during the year		$ 21,734	$ 21,734
Increase in specific prices (current cost) of inventories and property, plant and equipment held during the year (2)			$ 12,704
Effect of increase in the general price level			37,191
Increase in specific prices over (under) effect of increase in the general price level			$ (24,487)

(1) Excludes $17,634 depreciation expense included in Cost of Products Sold in the primary financial statements.

(2) The estimated current cost of Property, Plant and Equipment—Net and Inventories was $295,230 and $153,811 respectively, at December 31, 1981.

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Comparison of Selected Supplementary Financial Data Adjusted for Effects of Changing Prices
(In Average 1981 Dollars)

	(Dollars in Thousands, except per share data) 1981	1980	1979	1978	1977
Net Sales	**$672,514**	$747,443	$856,737	$848,962	$760,616
Historical cost information adjusted for general inflation:					
Income (Loss) from continuing operations	**$ (51,469)**	$ (13,690)	$ 9,118		
Income (Loss) per common share	**$ (3.88)**	$ (1.02)	$ .68		
Net assets at year-end	**$229,202**	$242,941	$625,839		
Current cost information:					
Income (Loss) from continuing operations	**$ (48,745)**	$ (16,102)	$ 4,602		
Income (Loss) per common share	**$ (3.69)**	$ (1.19)	$ .34		
Increase in specific prices of inventory and property over (under) effect of increase in the general price level	**$ (24,487)**	$ 1,063	$ 17,036		
Net assets at year-end	**$231,861**	$250,111	$675,984		
Other data, adjusted for general inflation:					
Purchasing power gain on net monetary liabilities held during the year	**$ 21,734**	$ 30,400	$ 27,826		
Dividends per common share	**$ .80**	$ .85	$ .85	$ .89	$ .90
Year-end market price per common share	**$13.91**	$14.10	$12.00	$15.94	$15.92
Average Consumer Price Index	**272.4**	246.8	217.4	195.4	181.5

Quarterly Financial Data

	Dollars in Millions 1981 by Quarter First	Second	Third	Fourth	1980 by Quarter First	Second	Third	Fourth
Net Sales	**$176.7**	**$174.1**	**$177.5**	**$144.2**	$162.0	$159.8	$182.7	$ 172.7
Cost of Products Sold	**139.5**	**135.0**	**149.4**	**128.0**	120.1	121.4	141.8	141.6
Gross Profit	**$ 37.2**	**$ 39.1**	**$ 28.1**	**$ 16.2**	$ 41.9	$ 38.4	$ 40.9	$ 31.1
Income (Loss) from Continuing Operations Before Income Taxes (Benefits) (See Note 3)	**$ 4.4**	**$ 6.0**	**$ (3.8)**	**$ (39.6)**	$ 10.0	$ 1.8	$ 5.2	$ (7.9)
Income Taxes (Benefits)	**1.3**	**1.7**	**1.3**	**(9.1)**	3.4	0.3	1.0	(5.9)
Income (Loss) from Continuing Operations	**3.1**	**4.3**	**(5.1)**	**(30.5)**	6.6	1.5	4.2	(2.0)
Income (Loss) from Discontinued Segments Net of Income Taxes (Benefits)	**0.8**	**0.6**	**19.3**	**33.6**	5.4	(4.8)	(0.2)	(244.2)
Net Income (Loss)	**$ 3.9**	**$ 4.9**	**$ 14.2**	**$ 3.1**	$ 12.0	$ (3.3)	$ 4.0	$(246.2)
Earnings per Common Share*								
					Dollars			
Primary								
Continuing	**$ .16**	**$ .25**	**$ (.41)**	**$ (2.19)**	$ .42	$ .04	$ .24	$ (.21)
Discontinued	**.06**	**.04**	**1.35**	**2.35**	.40	(.35)	(.01)	(18.01)
Net Income (Loss)	**$ .22**	**$ .29**	**$ .94**	**$ .16**	$ .82	$ (.31)	$ .23	$(18.22)
Fully Diluted								
Continuing	**	**$ .25**	**$ (.27)**	**$ (1.70)**	$ .38	**	**	**
Discontinued	**	**.03**	**1.08**	**1.88**	.31	**	**	**
Net Income (Loss)	**	**$ .28**	**$ .81**	**$ .18**	$ .69	**	**	**

*In accordance with the provisions of APB Opinion No. 15, earnings per share are calculated separately for each quarter and the annual period. Accordingly, annual earnings per share will not necessarily equal the total of the interim periods.
**Figure omitted—not dilutive. See Note 6 of Notes to Consolidated Financial Statements.

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GAF Products and Services

CHEMICAL PRODUCTS
GAF* Chemicals

High-pressure Acetylene Derivatives
Monomers, polymers, copolymers, solvents and organic intermediates derived from acetylene for use in cosmetic, petroleum, pharmaceutical, plastic, textile, adhesive, and other industries.

Monomers
2-Pyrol* monomer for nylon-like linear polymer, solvent and intermediate, solubilizer for drug-actives; V-Pyrol* comonomer and modifier for adhesives, coatings, fibers, etc. Intermediate; Alkyl vinyl ethers: monomers for copolymers, intermediates.

Vinylpyrrolidone Polymers
Polyvinylpyrrolidone (PVP) for cosmetics, adhesives, detergents, coatings, paper, textile, specialty uses; Plasdone* pharmaceutical tablet binder and coating agent; Plasdone* C excipient for injectables, blood plasma expander; Polyclar* AT stabilizer for beer, wine, vinegar, juice; Polyplasdone XL* tablet disintegrant for pharmaceuticals; Ganex* polymers for pigment dispersion, as protective colloids, cosmetic additives, PVP/VA copolymers, film formers for adhesives, cosmetics, etc.; Polectron* emulsion copolymer, a binder, stabilizer, opacifier for various uses. Gafquat* copolymers for skin- and hair-care products.

Vinyl Ether Polymers
Gantrez* AN copolymers for adhesive, detergent, photographic, textile applications: Thickener L and LN for paints and other latex systems; Gantrez* S resins for rapid cold-water solubility, used in detergents; Gantrez* ES resins for cosmetics, coatings, pharmaceuticals; Gantrez* M resins for adhesives and coatings, a latex heat sensitizer, and nonmigrating plasticizer.

Intermediates and Solvents
BLO* solvent for agricultural and lithographic applications; Butanediol: intermediate for thermoplastics, chain extender for urethanes; Butenediol: intermediate for pharmaceutical and agricultural chemical synthesis; Butynediol: agricultural intermediate, corrosion inhibitor; M-Pyrol* solvent for aromatic extraction of lube oils, high temperature plastics synthesis; Methylamines: reactive chemicals for pesticides, pharmaceuticals, detergents: N-Substituted pyrrolidones for formulating, purifying, or processing of coatings, drugs, dyes, plastics, etc.; Propargyl alcohol: intermediate for agricultural and pharmaceutical chemical synthesis, corrosion inhibitor; Tetrahydrofuran for magnetic tape coatings, reaction synthesis, PVC pipe cements, vinyl coatings.

Industrial Organic and Inorganic Chemicals
Complex cyclic and aliphatic compounds for use as active ingredients and as intermediates in the dye, pharmaceutical, agricultural, and chemical processing industries; carbonyl iron powders; iron pentacarbonyl.

Surfactant Intermediates
Nonylphenol; Dodecylphenol; Sodium Isethionate; Sarcosine; N-Methyltaurine.

Carbonyl Iron Powders
Microscopic-size spheres, containing as high as 99.5% metallic iron, used in VHF and UHF circuitry, transmitters, receivers, radar absorbing components, and in powder metallurgy.

Iron Pentacarbonyl
A technical grade, better than 99.5% pure, for use as starting material for chemically pure iron; reagent in preparation of oxides; light-sensitive photochemical; antiknock agent for gasoline and diesel fuel: catalyst in hydrocarbon synthesis; intermediate in manufacture of chemically useful reagent complexes.

Specialty Chemicals
Processing and formulating agents, including bactericides, coating and finishing agents, adhesive additives, sequestrants, antistatic agents, lubricants, and solvents, for use in various industries; agricultural chemicals; oil field chemicals; textile chemicals.

Antioxidant
Uvi-Nox* primary antioxidant for polyolefins; monomer inhibitor.

Antistats for Plastics
Gafac* phosphate esters for PVC, polyolefins, polystyrene.

Biocides
Biopal* iodophors for detergent-sanitizers.

Corrosion Inhibitors
Butoxyne* 497 for acid pickling, electroplating, specialty applications; Katapone* VV-328 corrosion inhibitor for steel, copper, aluminum. Also for petroleum processing, drilling, acidizing.

Lubricants
Antara* extreme-pressure additives for metalworking fluids.

Sequestrants
Cheelox* sequestrants, chelate trace metal impurities in textile processing, leather dyeing, paper processing; clarify liquid soaps and shampoos; stabilize rubber latices and agricultural chemical emulsions; sequester calcium, iron, copper, magnesium, tin, etc., in hard water and wet processing.

Textile Auxiliaries
Gaftex* detergents, foam suppressants, emulsifiers, leveling agents, print paste thickener; Katanol* dye carrier for pressure dyeing of disperse-dyeable polyester; Katapol* VP-532 retarder for cationic dyes; Peregal* dyeing, leveling, stripping assistants; Solidogen* dye fixing agent for direct and developed dyes.

Other Specialty Chemicals
Blancol* dispersant and peptizing agent for pigments, clays, and other solids in paper, agricultural chemicals, latices; Gafamide* CDD-518 foam stabilizer for liquid dishwashing products, drycleaning, heavy-duty detergents; Gafgard* radiation-curable coatings.

Surfactants
Nonionic, anionic, and cationic surface-active agents for use as detergents, emulsifiers, dispersants, and wetting agents.

Nonionics
Antarox* surfactants: low-foaming household and industrial detergents; Emulphogene* emulsifiers, foaming light- or heavy-duty detergents, latex stabilizers; Emulphor* dispersants, emulsifiers, antistats, textile lubricants; Igepal* surfactants for chemical and thermal stability in textile and paper processing, hydrocarbon and agricultural chemical emulsification, detergent compounding, emulsion polymerization, etc.

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Anionics
Alipal® high-foaming detergents for household products, static control, primary emulsification; Antara® lubricants and corrosion inhibitors in oil- or water-based systems; Gafac® detergents and emulsifiers with antistatic, lubricating, dedusting, anticorrosion properties; Igepon® detergents, wetting agents and dispersants, both high- and low-foaming and compatible with soaps, used in textile and hard surface detergency and in formulating cosmetics and agricultural chemicals; Nekal® wetting agents for paper, textile, paint, ink applications.

Cationic
Katapol® water-soluble emulsifiers, for mineral oils and agricultural chemicals; antiprecipitants and textile leveling agents; antistat and lubricant for wool and synthetic fiber processing.

GAF® Engineering Plastics
Polybutylene terephthalate (PBT) thermoplastic molding compounds for automobile, mechanical and electrical parts, electrical/electronic components, appliance housings, and business machines.

Thermoplastic Polyesters
Gafite® unreinforced and glass-reinforced PBT compounds; Gafite® LW low-warp PBT compounds, from impact-modified, mica-reinforced materials to glass fiber/mica combinations; Gaftuf® high-impact PBT compounds in glass-reinforced and unreinforced grades.

GAF® Mineral Products
Natural and ceramic-colored mineral granules in a variety of screen gradings and calibrated colors for roofing and other uses; inert fillers.

BUILDING MATERIALS

GAF® Building Products

Prepared Roofing
Complete line of premium organic and glass fiber self-sealing asphalt shingles.

Asphalt Roofing Shingles
Timberline® premium asphalt shingles, random butt design, earth-tone colors; Timberline® Class A glass fiber shingles, for extra safety and long life; Sentinel™ Class A glass fiber shingles, fire and wind resistant; Standard self-sealing shingles, rugged with classic square-tab design; Fire Guard® Class A heavyweight twin-tab shingles; Sovereign® shingles, heavyweight, twin-tab design; Tite-On® locking shingles, distinctive basketweave pattern; Nor'easter® strip shingles, no cut-outs, total double coverage; Suburban® Twin-Tabs® shingles in classic square-butt style, sweeping appearance.

Roll Roofing
Smooth-surfaced roll roofing; mineral-surfaced roll roofing, combines utility and economy with fire-resisting qualities and attractive colors; Dubl-Coverage® mineralized roll roofing provides double-thick protection.

Built-up Roofing Systems
Products for hot-applied application including organic- and glass mat-based roofing membranes, asphalts, cements and coatings; Mineral-Shield® cold-applied built-up roofing system; accessories.

Roofing Membranes
Air-Vent® asphalt-saturated felts; Combination flashing, glass-reinforced; Gafglas® flashing; Universal base sheet, organic, coated both sides for use on asphalt roofs and over poured gypsum, wood fiber decks, roof insulation, a vapor retarder for above-deck insulation; Strata-Ply® roofing felts for three-ply roofs.

Glass Mat-based Products
Gafglas® type 3 & 4 lightweight ply sheets; Gafglas® asphalt-coated base and ply sheet; Gafglas® mineral-surfaced cap sheet; Gafglas® Stratavent® perforated vent ply, vented glass-base felt; Gafglas® Stratavent® vent ply for nailable decks, venting glass-base felt.

Cements and Coatings
Jetblak™ Flashtite® cement, an asphalt plastic cement for built-up roofing flashing; Aluminum coating, reflective, for smooth-surface roofs, metal and masonry surfaces; Mica Weatherguard® coating and Weather Coat® asphalt emulsion for smooth-surface roofs.

Mineral-Shield® Built-up Roofing
A time-proven, cold-applied built-up roofing system combining modern application techniques and specially formulated roofing products. Products include: Mineral-Shield® roofing membrane, mastic, granules, and aluminum mastic.

Accessories
Gaflex™ expansion joint covers; Vent stacks to release moisture trapped in built-up roofs.

Insulation Products
Insulation products for built-up roofing applications; roof insulation fasteners; building insulation.

Roof Insulation
Gaftemp® urethane insulation board, for use where high thermal value is paramount; Gaftemp® urethane-perlite insulation provides high insulating efficiency combined with rated fire resistance; Gaftemp® perlite insulation board combines thermal insulation with dimensional stability; Gaftemp® Isotherm insulation is Factory Mutual Class I fire rated for insulated steel deck assemblies; Gaftite® roof insulation fasteners provide maximum wind uplift resistance.

SERVICES

Building Supply Centers
Distribution outlets for GAF building materials and allied products.

Chemicals
Custom manufacture of pharmaceutical, agricultural, and other specialty chemicals in developmental and commercial quantities.

GAF

GAF Locations

Corporate Offices
140 West 51 Street
New York NY 10020
212-621-5000

Domestic Operations

GAF Corporation's plants, research laboratories, sales offices, and distribution centers are located throughout the U.S.A.

CHEMICAL

Alabama
Huntsville

California
Irvine

Illinois
Lombard

Kentucky
Calvert City

Maryland
Hagerstown

Missouri
Annapolis

New Jersey
Bound Brook
Linden

North Carolina
Charlotte

Pennsylvania
Blue Ridge Summit

Texas
Seadrift
Texas City

Wisconsin
Pembine

BUILDING MATERIALS

Alabama
Mobile

California
Fontana

Colorado
Denver

Delaware
Wilmington

Florida
Tampa

Georgia
Savannah

Illinois
Joliet

Indiana
Mount Vernon

Kansas
Leawood

Maryland
Baltimore
Beltsville

Massachusetts
Millis

Minnesota
Minneapolis

Missouri
Kansas City
St. Louis

New Jersey
Gloucester City
South Bound Brook

New York
Buffalo
Syracuse

North Carolina
Charlotte

Pennsylvania
Erie
King of Prussia

South Carolina
Chester

Tennessee
Memphis

Texas
Dallas

Virginia
Norfolk
Springfield

CORPORATE

New Jersey
Wayne

New York
New York

Domestic Subsidiaries
GAF Broadcasting Company, Inc.
New York, N.Y.

GAF Export Corporation
New York, N.Y.
Carolina, Puerto Rico

GAF Hawaii Inc.
Honolulu, Hawaii

GAF International Corporation
New York, N.Y.

Major International Marketing and Manufacturing Locations

Australia
Melbourne
Sydney

Austria
Vienna

Belgium
Sint-Niklaas

Brazil
São Paulo

Canada
Mississauga

Denmark
Virum

Finland
Helsinki

France
Louvres

Great Britain
Colnbrook
Manchester

Greece
Athens

Israel
Tel Aviv

Italy
Milan

Japan
Tokyo

Mexico
Mexico City

The Netherlands
Delft

New Zealand
Auckland

Norway
Oslo

Singapore
Singapore

South Africa
Johannesburg

Spain
Barcelona

Sweden
Stockholm

Switzerland
Zug

West Germany
Frechen

Affiliate:
GAF/Hüls Chemie GmbH
Marl, West Germany

END